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STATE OF WASHINGTON

Ninth Annual Report

OF THE

Public Service Commission OF WASHINGTON

TO

THE GOVERNOR



COVERING THE PERIOD FROM
DECEMBER 1, 1918, TO NOVEMBER 30, 1919

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1919

**THE PUBLIC SERVICE COMMISSION
OF WASHINGTON**

E. V. KUYKENDALL, Chairman.

**HANCE H. CLELAND, FRANK R. SPINNING,
Commissioners.**

J. H. BROWN, Secretary.

Olympia, Dec. 1, 1919.

LETTER OF TRANSMITTAL

Olympia, December 1, 1919.

Louis F. Hart, Governor of Washington:

We herewith transmit to you the Annual Report of The Public Service Commission of Washington for the year ending November 30, 1919.

During the period covered by this report occurred the sixteenth legislative session.

New laws enacted at that session affecting this Commission included Chapter 33, amending the five-cent street car fare law; Chapter 93, providing for the construction and operation of toll bridges; Chapter 98, relating to eminent domain for warehouses; Chapter 138, city street car line extensions; Chapter 153, physical track connections; and Chapter 189, generally amending the grain inspection laws.

August 15, 1919, Senator E. V. Kuykendall of Pomeroy and Hance H. Cleland, who as assistant attorney general, had been the legal adviser of the Commission for some time, were appointed to the Commission to succeed E. F. Blaine of Seattle, and Arthur A. Lewis of Spokane; and, at the next regular meeting of the Commission, Senator Kuykendall was elected chairman.

While the ninth annual report herewith submitted embraces a substantial and fairly satisfactory record of the Commission's work during the year, it should be borne in mind that, from the standpoint of regulation, the period has been characterized by the turbulence of the times and the chaotic condition of the utility organizations and policies.

A description of the transportation condition, the conversion of manufacturing plants from war-time production, the abnormal demand to which public service companies and utilities have been subjected, either through unusual production or extraordinary retrenchment and the restoration of ocean transportation, is hardly necessary. Suffice to say that the regulatory powers of the nation have been fraught with bewildering questions and problems which coupled with frantic efforts toward freedom from war-time restraint makes for much apprehension on the part of public service, while the lines of each individual state are so inadequately defined.

During the past year the railroads and the express companies have continued in the hands of Federal control. The telephone and telegraph companies were restored to their private ownership August 1st of this year. With approximately 8,000 miles of railroad and all state telephone and telegraph service and the heavy volume of traffic for express, the operation of these four classes of companies are necessarily of great importance to this state. Together with the hundreds of other utilities they form the economic basis for commercial and industrial activities in general and vitally affect the welfare of the state.

It is only fair to state that conditions obtaining during Federal control developed a conflict of jurisdiction. Through Federal court decision as delivered in the North Dakota railroad case in June of this year, state vigilance and initiative with reference to these four classes of utilities has been

practically limited to whatever measure of cooperation the Federal authorities desired to sanction.

Thus to a great extent the public has been enabled to survey the widely advertised evils alleged by the carriers as resulting from the state control and to detect first hand the fallacy of proposed elimination of state authority as a panacea for all their ills.

The scope of this question is too great for any attempted analysis in this report. But we have no hesitancy in stating our belief that the one outstanding fact resultant of the experimentation of Federal control is that the exercise of the regulatory powers designed to secure the protection needed by state, community or individual drifts away from that individual, community or state in proportion to the extent of such centralized authority until eventually lost to the purposes for which reasonable rates, adequate service, adequate facilities, and nondiscrimination are the four products of successful operation which all desire. We are content to rest the case with the public users of these utilities and trust to their reason as to whether or not they feel nearer to their attainment through their own local representatives than via the much longer route to the national capital. Clearly, it is a case for the far Northwest in which "distance does not lend enchantment to the view." Regardless of the kind of operation of utilities there will of necessity arise from time to time complaint from the public concerned as to the reasonableness of the rates, the adequacy of service and facilities, discrimination between localities and individuals, inconvenience, loss and damage and delay. In none of the plans presented to Congress by the carriers is there a single one which contemplates a continuation of private control that does not also embrace the elimination of state control.

We do not believe the people would contemplate taking from the state its rights to regulate rules, rates and practices of such companies. We do not believe there is a shipper who has great faith in the more ready adjustment of his complaint or case through pooling the same with the countless numbers sure to come before a single centralized control. The matter can be sifted (east, west, north and south) as may be and there is no doubt as to which will rise to the top for first consideration. The big interests with large legal array and the fullest representation will be found at the top; in other words, they will be heard and considered first. The minor complaints, however essential to individual, community or state, will sift to the bottom to be finally smothered through the lack of necessary representation.

These are but some of the results which will go hand in hand with centralization of regulatory powers and which will inevitably characterize the over-endowed governmental functioning even though there be no intent of discrimination and these are but a few of the dissatisfactions that will come to the people of the state and particularly this state, handicapped as it is by the barrier of distance to headquarters should the powers now possessed by the state be relinquished, thus surrendering the protection afforded local shippers and communities by state commissions.

The willingness of the people to bear any burden necessary to wartime has brought about acquiescence in many encroachments and usurpation pending after war reestablishment.

It is not incumbent upon the people of this or any other state to fall a victim to the catch phrase coined by the carriers for the occasion: "We

live under forty-eight different masters; we need only one." The public is not going to be misled by the false statement to the effect that car shortage, inadequate services and facilities and lack of railroad construction are all due to the "dual system of control." Neither does the hard-worked, often-cited Shreveport case preclude any alternative. It is perfectly sound and reasonable to look to the establishment of a relationship between federal and state authorities which will eliminate the twilight zone system of jurisdiction and under which harmonious rate structure and adequate service can be secured, both state and interstate.

Repeatedly during the year has this Commission been faced with the futility of attempting assistance in matters vital to the state except through personal representation before Federal authorities at Washington, D. C., owing to the exclusive Federal control and the authority vested in the director general of railroads in the matters of rates and services. On three occasions it has been necessary for the Commission during the year to send its traffic expert, Mr. O. O. Calderhead, to middle west or eastern centers, and we and various individuals and communities have likewise been forced to send their representatives to Washington City in order to have their needs considered.

With all due credit to our national government and its officials, we cannot help feeling that the state is the logical agency in dealing with matters concerning rates and service within the state and that the national government is the proper agency when adjustments are required of affairs common to groups of states or to the nation as a whole.

Since submitting the eighth annual report, in which reference was made to the study of terminals, the Commission has received the report of Engineer R. H. Thomson, the engineer employed in the completion of this study. We are in hopes this report will later be published and at that time we expect to comment upon same, but for the present will only offer a brief resume.

From the Commission's study it can be definitely stated that the growth of various cities throughout the country has been fostered and accelerated in active and intelligent competition with other cities. It has been advertised at some points that the terminals are more advantageous by reason of the facilities afforded for proper handling of freight, particularly for export and import, and the cheapness for which such service can be supplied.

After receiving the report of Engineer Thomson, a plan which covered a comprehensive terminal system for the ports of Seattle, Tacoma and Everett was submitted to the legislature. The failure of adoption was due chiefly to the opposition of the railroad carriers, who based their argument upon the assurance that under Federal control the terminals of various lines were then consolidated, and at the time being operated as a single unit under Federal director.

While some improvements have been made in the actual operations, the limitations and restrictions necessarily placed about such temporary experimentative plans, the uncertainty as to the future operation are such as to defeat the object of a consolidated and unified terminal. We cannot emphasize too strongly the question of terminal facilities and operation constitute the most important single problem in the railroad situation and that some

method of complete coordination and unification of the terminals, divorcing individual lines from interest in such terminals, is vitally essential to the welfare of the larger communities.

The Commission has felt that while under Federal control it would be unwise to undertake further active efforts to bring about a permanent solution, leaving the subject temporarily in abeyance to be handled after final disposition has been made of the carriers by Congress. In the meantime this question is being carefully considered by the Commission and will be further dealt with at a later period, the object constantly in view being a more liberal use of terminal facilities in the interest of free movement of commerce.

The reestablishment of export and import rates, cancelled by order of the director general during 1918, the readjustment of coal rates with a view of wider coal distribution from the mines in this state, the securing of special rates for road-building material in which a reduction of ten cents per net ton in rates established for road-building and maintenance, the presentation of the fruit rate case involving the challenging of the reasonableness of the fruit rates as established by order No. 28 of the director general, have constituted live issues during the year, and the request for preparation of special data for presentation to the Interstate Commerce Commission necessitated the Commission's sending its traffic expert, Mr. Calderhead, to Chicago and the East to secure this information.

During the year the Commission of Public Docks of the city of Portland, the Portland Chamber of Commerce and the Portland Traffic Association filed a complaint before the Interstate Commerce Commission asking that lower rates be established between Portland, Oregon, and the interior than apply between Puget Sound cities and such interior points. The complaint in question sought to alter the rate adjustment existing between the North Pacific Coast terminals and the territory known as the Inland Empire, embracing Eastern Washington, Northeastern Oregon and the Panhandle of Idaho, due, as Portland claimed, to the more favorable operating conditions of the lines entering that city as compared with operating conditions on the lines reaching Puget Sound.

This Commission intervened and compiled considerable data with the view of furnishing the Interstate Commerce Commission accurate information as to operating conditions, including the cost of service. In this connection the Commission requested and received valuable assistance from Dean Stephen I. Miller, Jr., director, college of business administration of the University of Washington, and his associates, who assisted in securing figures showing the value of exports and imports of the Pacific Coast and diagraming the grades and curvatures of the various railroads affected. The case was submitted to the Interstate Commerce Commission at hearings held in Seattle and Portland during July and August, no decision having yet been rendered. The compilation of a considerable portion of this data required a trip to Washington by Mr. Calderhead in order to investigate the records of the carriers at that point as well as St. Paul, Chicago and Omaha.

The annual meeting of the National Association of Railway and Utilities Commissioners was held in Indianapolis, Indiana, on October 14th and was attended by Chairman Kuykendall, Commissioner Cleland and Traffic Expert Calderhead. The solicitor, Mr. Charles E. Elmquist, employed by the Na-

tional Association as their representative before the Interstate Commerce Commission in valuation work, resigned his position, effective December 1st, and the committee on valuation appointed as his successor Mr. John Benton, who for the past two years has been the solicitor of the director of valuation of the Interstate Commerce Commission.

It was considered advisable that Chairman Kuykendall and Mr. Calderhead proceed from Indianapolis to Washington, D. C., for the purpose of presenting to the Railroad Administration the urgent need of the shippers of this state for relief in the matter of cars, especially refrigerator and livestock. The shortage of refrigerator cars had become acute and cold weather was threatening the fruit of the various producing centers, while livestock at points served by the Great Northern Railway was suffering severely on account of the car shortage. They were successful in securing relief from this condition as evidenced by a letter of thanks from the Loomis Livestock Association stating that "the northern cattlemen are getting cars when they want them and appreciate the Commission's efforts which certainly brought results."

The Commission feels gratified with the liberal representation of its members on important committees of the National Association.

With the resignation of the general solicitor, Commissioner Cleland was elected to succeed Mr. Elmquist on the National Association's committee on valuation, the most important membership committee of the association, being the only western representative since C. B. Aitchison, then Oregon commissioner, was appointed on the Interstate Commerce Commission. Each member of this Commission will assume additional responsibility through serving on committees of the association and there is no more important work in the common interest than uniformity and standardization of rates, rules and regulations, fares, charges, accounts and practices accruing to each state through this cooperative effort.

Toward fall highway construction began to suffer on account of shortage of equipment. The emergency status of this work called for the closest cooperation between this Commission, the state highway department and the Railroad Administration in relieving the shortage of cars to handle cement. The Commission has consistently endeavored to prevent car shortage usually experienced in the fall during the harvesting season, appealing to the shippers by letter to promptly load cars when placed, promptly unload cars when delivered and use to full carrying capacity.

Despite the success which met our efforts in previous years, this year's record of freight car performance reflects a general relaxation on the part of shippers in heavy loading of available equipment, the total average for the year being almost two tons less per loaded car than in 1918. This recurrent car shortage is one of the matters in which an ounce of prevention is worth a pound of cure and though peculiarly placed while under Federal control, the Commission nevertheless is earnestly endeavoring to affect relief.

As this report goes to the press, we are advised of our successful opposition to a recent proposal by the carriers for a general increase in lumber distance rates in Western Washington.

We would call attention to the fact in selecting new employees, the Commission has been glad to follow the spirit, as well as the letter of the law, in giving preference in employment to returned soldiers and sailors.

With the close of the war and the release of former employees of this Commission who entered the service, Captain Herbert J. Flagg, Coast Artillery, U. S. Army, returned to his former position as assistant engineer; Z. E. Merrill, sergeant, Corps of Engineers, U. S. Army, and C. E. Delbridge, master signal electrician, Signal Corps, U. S. Army, were employed as assistant engineer and engineering stenographer, respectively. On October 15th, D. F. McCurrach, chief engineer of the Commission, resigned to engage in private practice, and Herbert J. Flagg was appointed to fill the vacancy. C. A. Cad-den, assistant engineer, resigned on November 8th, and the vacancy thus created was filled by the appointment of Lieutenant Miles E. Clark, Corps of Engineers, U. S. Army. It will be noted from the foregoing that the entire personnel of the engineering department is now composed of former service men. Upon the resignation of E. D. Ridley as auditor of the Commission, his place was filled by the appointment of R. W. Clifford, first lieutenant, Infantry. H. F. Wiggins, second lieutenant, Corps of Engineers, U. S. Army, returned to his post as rate clerk for the Commission on his return from France. Raymond Dalton, sergeant, Field Ambulance Corps, resumed his duties with the tariff department on his return from France. T. I. Oakshott, sergeant, Infantry, was appointed stenographer in the tariff department.

The close of the fiscal year finds the work of this Commission, as will appear from the detailed report herein, to be more closely up to date than in many years. No case remains undisposed of that properly could or should have been reached at this time.

We respectfully invite your attention to the more detailed reports of the different departments following.

ORDERS IN CASES AFFECTING STEAM RAILWAYS.

No. 1678.

Wenatchee Commercial Club, a Corporation, Complainant, v. Great Northern Railway Company, a Corporation, Northern Pacific Railway Company, a Corporation, and Columbia and Puget Sound Railway Company, a Corporation, Respondents.

Protest on coal rates. It appearing to the Commission that no joint rates existed in the movement of coal from Puget Sound points to Wenatchee, the complaint was dismissed as to the Northern Pacific Railway Company and the Columbia and Puget Sound Railway.

November 24, 1916, the Commission entered the following

Findings of Fact.

I.

That the complainant is a corporation duly organized and existing under and by virtue of the laws of the State of Washington, and its principal business is at Wenatchee, this corporation being duly organized for social and charitable association.

II.

That the Great Northern Railway Company is a common carrier engaged in the transportation of passengers and property between points in the State of Washington, and that as such common carrier it is subject to provisions of Chapter 117, Session Laws of 1911 of the State of Washington, the same being the Public Service Commission law of said state.

III.

The tariff schedules of the Great Northern Railway Company now effective and in operation by said railroad prescribes a commodity rate on coal from the Chehalis, Tenino and Snoqualmie groups of coal mines to Wenatchee of \$2.30 per short ton, the greatest distance by rail haul from any of the group of mines to Wenatchee being 265 miles.

IV.

From the Chehalis, Tenino and Snoqualmie groups of mines the commodity rate per ton on coal via the Northern Pacific Railway to North Yakima is \$1.40, the greatest distance of line haul being 213 miles.

V.

From Seattle to Spokane via either the Great Northern Railway or the Northern Pacific Railway the commodity rate on coal is \$2.75, the line haul being practically 339 miles.

VI.

From Hosmer, Michel and Swinton, British Columbia, the commodity rate on coal via the Great Northern Railway is \$3.00 per net ton, the line haul being 466 miles.

VII.

From the Wyoming and Utah coal fields to North Yakima the commodity rate upon coal is \$4.50 per ton, and the rate from the same coal fields to Wenatchee via Great Northern is \$5.00 per ton.

VIII.

The commodity rate upon cement from Puget Sound points to Wenatchee is \$4.00 per ton.

IX.

The rate upon fuel oil from Seattle via Great Northern to Wenatchee and via the Northern Pacific to North Yakima, the distance being only two miles different via either road is equal, or twenty-five cents per 100 pounds.

X.

Via the Great Northern from Puget Sound points to Wenatchee the commodity rate on lumber is fifteen cents per 100 pounds, and the class rate on lumber fixed by order of this Commission is thirteen cents per 100 pounds.

XI.

Heretofore by order of this Commission a class rate was fixed on coal of \$3.20 per short ton over the Great Northern from Seattle to Wenatchee and the commodity rate on coal as fixed by the Great Northern Railway is ninety cents per ton less than the class rate above mentioned.

XII.

Heretofore by order of the Commission the rate upon coal over the Northern Pacific from Roslyn to North Yakima was fixed at ninety cents per ton, and to balance the commodity rate fixed by the Commission the Northern Pacific reduced its rates on coal from Puget Sound points to North Yakima and fixed the same at \$1.40 per ton.

XIII.

The average distance of haul of all the Great Northern's freight in Washington is 168 miles, or practically the distance between Seattle and Wenatchee. The average rate on freight per ton mile over the Great Northern in Washington for the year ending June 30, 1915, was ten and one-half mills. The rate per ton mile on coal from Seattle to Wenatchee is fourteen mills.

XIV.

There are no coal mines along the Great Northern Railway Company's lines in Washington. In proximity to the lines of the Northern Pacific in both eastern and western Washington there are coal mines which furnish a large amount of freight to that road.

XV.

The movement of empty cars on the Great Northern Railway is from Wenatchee west to Puget Sound points, and as a rule cars loaded with coal at Puget Sound points for Wenatchee are returned unloaded.

Opinion.

We believe that there is no marked similarity between the handling of coal by the Northern Pacific and Great Northern Railway companies in this state. While the Northern Pacific has several mines adjacent to its tracks, some in eastern and some in western Washington, there is a dearth of coal properties in this state in proximity to the tracks of the Great Northern. We do not question but that the rate of the Northern Pacific from Puget Sound points to North Yakima on coal is influenced by the rate established by the Commission from Roslyn to North Yakima. In comparing the rates on coal from the British Columbia coal fields to Wenatchee via Great Northern with rates from other points over the Great Northern to Wenatchee there is little to throw light upon the contention of the plaintiff. Even if the law should permit us by a mere comparison of rates to reduce a rate the analogy should be striking and convincing.

It is in evidence that the rate per ton mile upon coal from Seattle to Wenatchee via Great Northern is fourteen mills, while the average rate per ton mile on all freight hauled on the Great Northern in this state is ten and one-half mills. At first blush this a radical difference, especially when the value and character of coal is considered. Yet the evidence shows that coal is handled from Puget Sound points to Wenatchee at a lower rate than either lumber, cement or fuel oil, and cars carrying coal from the west to Wenatchee as a rule return empty.

There is no direct evidence before us as to the actual cost of the service performed in the transportation of coal from Puget Sound points to Wenatchee. Evidence of this character is not easy to procure and is expensive. For these reasons can it be dispensed with when the rights of property are involved? "When an existing freight rate is attacked the burden is on the complainant to establish that it is unreasonable in fact: *Louisville and Nashville Railway Company v. The United States*, 238 U. S. 10." This case also holds that it is unsafe to put too much reliance upon a mere comparison of rates. The rates heretofore established by this Commission are presumed to be fair and reasonable. By an order of this Commission heretofore made, the Great Northern Railway is permitted to charge a sixteen cent class rate on coal from Seattle to Wenatchee. This rate is ninety cents a ton higher than the commodity rate on coal from Puget Sound points to Wenatchee. We are of the opinion that the plaintiff has failed to make a case against the defendant the Great Northern Railway.

Wherefore, It Is Ordered, That the complaint of the plaintiff be dismissed.

February 5, 1917, complainant filed its motion for a rehearing, for the purpose of filing a further brief. Granted upon consent of parties interested. The Commission, as of December 19, 1918, entered its order closing the case, no further steps having been taken in its prosecution.

No. 4767.

St. Paul and Tacoma Lumber Company, a Corporation, Complainant, v. Northern Pacific Railway Company, a Corporation, and W. G. McAdoo, Director General of Railroads, Respondents.

Petition filed January 15, 1919, praying that certain demurrage charges be cancelled or that present rules be changed retroactively to provide that no demurrage shall be collected for detention of cars caused by act of God, or caused by the performance by the shipper of its obligation under any law of the state rendering it impossible for such shipper to handle the said cars, or whenever conditions are such as to render it unsafe or impossible to load the cars.

January 31, 1919, the Commission entered the following

Findings and Order.

I.

That the petitioner is a corporation organized under the laws of the State of Washington, having its principal place of business in Tacoma, Pierce county, and that it has paid its last annual license fee as a corporation to said state.

II.

That the respondent, Northern Pacific Railway Company, is a railway corporation authorized to do and doing business as a foreign corporation in the State of Washington, having its principal place of business in this state in the city of Tacoma, in said Pierce county.

III.

That respondent, W. G. McAdoo, is the director general of the railroads of the United States, including the said Northern Pacific Railway, and was duly appointed as such director general by the president of the United States under the authority of acts of Congress; and as such director general the said W. G. McAdoo is in possession and control of the railway system of the said Northern Pacific Railway, and by general order has directed that the interests of the United States and all interest represented by him as such director general in any suit or matter pending before the courts, or other departments having charge of such matters, should be taken or sued upon in the name of said W. G. McAdoo as such director general.

IV.

That under tariffs duly published by the said Northern Pacific Railway Company, it is provided among other things, that demurrage charges should be assessed against any person or corporation on cars of the said railway company in the possession of such person or corporation after the expiration of free time allowed under the said tariff, at the rate of three dollars (\$3.00) per day for the first four days, six dollars (\$6.00) per day for the next three days, and ten dollars (\$10.00) per day for each succeeding day. That under and (except as herein stated) pursuant to said demurrage rules, the said respondents have assessed against the petitioner the sum of one hun-

dred thirty-nine and 5-100 dollars (\$139.05) as demurrage charges accruing on account of certain twenty-two cars of the said respondents in the possession of the petitioner between the 26th day of April, 1918, and the 4th day of May, 1918.

V.

That the conditions between April 26 and May 4, 1918, were such that it was unsafe and dangerous, and practically impossible to employ men and teams in loading said cars, and that during all of said time it was impossible to proceed with the loading and discharging of said cars without subjecting them and the freight thereon to absolute loss and destruction as hereinafter more particularly shown.

That the cars referred to in the preceding paragraph and the possession of which were the basis of said demurrage charges in the amount of one hundred thirty-nine and 5-100 (\$139.05) dollars as aforesaid, had been delivered to petitioner to be used by it for the shipment of logs from what is known as its camp No. 1, situate on the petitioner's branch logging railroad in section 35, township 17 north, range 5 east, about twenty (20) miles distant from any railroad connection, and that petitioner's said camp is situate on the westerly slope of the Cascade mountains and in what is known as the great timber belt of western Washington, and that immediately adjoining and contiguous to said camp there is now and during the times herein referred to, was situate an immense belt of growing timber, in part owned by the petitioner, and to the extent of several hundred million feet of timber, owned by other individual persons and corporations, a considerable portion thereof being owned by the respondent, Northern Pacific Railway Company, and by the State of Washington and the United States Government.

VI.

That on and some time prior to said 26th day of April, 1918, the petitioner had at said camp 1 approximately one hundred and twenty (120) men employed for its logging operations, and at said time the petitioner had a large amount of logs on hand ready for shipment, and the said camp was fully equipped in every way to load and discharge the said cars that had been delivered to it by the respondents, and that the sole and only reason why the said cars were not loaded and discharged within the free time allowed by demurrage rules, was because conditions making it then impossible to load said cars and because of the certainty of the loss of said cars and freight if they were then loaded, and because of the obligation of the petitioner and its said employees to comply with the laws of the state and to save and preserve the property of the respondents and other persons, all as hereinafter stated.

VII.

That on and some time prior to the 26th day of April, 1918, a fire was discovered on section 1, township 17 north, range 5 east, the property belonging to the Northwestern Improvement Company, which is a subsidiary corporation of and completely owned and controlled by the said respondent, Northern Pacific Railway Company. Said fire was burning in the belt of timber hereinbefore referred to, and was threatening to spread to and destroy, and if not put out as herein stated, would have destroyed the said

twenty-two cars and the said logs ready to be loaded on same, and also all of the said camp equipment of the petitioner, and all of the said timber in said district, not only that belonging to the petitioner, but the several hundred million feet of timber belonging to the respondents and to the State of Washington, the United States and others; all of the surrounding country and timber being then in a very dry state.

That under the laws of the State of Washington the petitioner and its agents and employees, as well as all other citizens and persons in the State of Washington, are required to comply with all reasonable rules and regulations and orders of the state forester, and the state forester's forest rangers and deputies, in order to assist in putting out any such fires as that which was discovered burning as aforesaid in said district; and the petitioner alleged that under and pursuant to the said laws of the State of Washington and to the orders of the state forester and his forest rangers and deputies, all of the petitioner's employees and agents at its said lumber camp No. 1, were required to and did give all of their time and efforts during the time when said alleged demurrage charges accrued, to-wit: From the 26th day of April, 1918, to the 4th day of May, 1918, to assist in putting out the said fires, and the petitioner alleged that they did succeed in putting out the said fires and thereby prevented the said loss of the said twenty-two cars and the freight therefor, and the timber and property of the respondents and others, including the State of Washington and the government of the United States; and immediately thereafter and as soon as the conditions made it safe and possible to proceed with the loading of said twenty-two cars, the petitioner did so load the same and deliver them without any delay to the respondent; and the petitioner alleged that after deducting the days during which, as aforesaid, it was unsafe and impossible to load said cars, all of said cars were loaded and delivered to the respondents within the free time allowed under said tariff rules.

VIII.

The petitioner further alleged that its said camp No. 1 and the said fire, were located at a distance of twenty (20) miles from the nearest point reached by road where other help could be secured to put out the said fire, or where other persons could be employed to assist in loading, handling and discharging the said cars upon which demurrage charges accrued as aforesaid, and that during the time said demurrage charges accrued it was impossible to secure any assistance or any other employees to load and discharge the said cars, and that the sole reason why the said cars were not loaded and discharged was because it was unsafe and impossible to do so, as aforesaid, and because of the petitioner's obligation to assist in putting out said fires as aforesaid, and also to prevent the loss of said cars and the freight therefor as aforesaid.

Opinion.

The Public Service Commission of Washington, as well as the Interstate Commerce Commission and many other state commissions, has approved the national car demurrage rules. These rules are substantially carried into Northern Pacific No. 1012-F, Northern Pacific Railway, I. C. C. No. 6433 issued February 5, 1918, effective February 10, 1918.

Under rule 8 of the national car demurrage rules carried in the above numbered tariff, among other things, it is provided:

"No demurrage charges shall be collected under these rules for detention of cars through causes named below. Demurrage charges assessed or collected under such conditions shall be promptly cancelled or refunded by the carrier.

"Section A.—Weather Interference:

"1. When the condition of the weather during the prescribed free time is such as to make it impossible to employ men or teams in loading or unloading, or impossible to place freight in cars, or to move it from cars, without serious injury to the freight, the free time shall be extended until a total of forty-eight hours' free from such weather interference shall have been allowed.

"2. When shipments are frozen while in transit so as to prevent unloading during the prescribed free time. This exemption shall not include shipments which are tendered to consignee in condition to unload. Under this rule consignee will be required to make diligent effort to unload such shipments, and shall not be entitled to additional time unless within the prescribed free time he shall serve upon the carrier's agent a written statement that the lading was frozen upon arrival.

"3. When, because of high water or snow drifts, it is impossible to get to cars for loading or unloading during the prescribed free time.

"This rule shall not absolve a consignor or consignee from liability for demurrage if others similarly situated and under the same conditions are able to load or unload cars."

Counsel for petitioner in his oral argument laid stress upon the fact that the petitioner's force of help was commandeered by the authorities to aid in putting out a fire in the forest, and it is claimed that if the fire had not been kept under control that it would have destroyed the cars of the carrier upon the retention of which the demurrage in question accrued.

In Interstate Commerce Commission case No. 9449, *Union Hay Company v. Chicago & Northwestern Railway Company, et al.*, it was held that the fact the federal government had embargoed the shipment of hay did not stop the accruing of demurrage on a carload of hay which failed to move because of such embargo; and, in this case the Commission calls attention to the case of the *Union Hay Company v. Chicago, St. Paul, Minneapolis & Omaha Railway Company et al.*, 45 I. C. C., page 597, quoting as follows:

"Federal embargoes are declared in the interest of the general public and must be observed. By observing them the carrier incurs no liability to the shipper whose goods are embargoed."

In oral argument it was contended that the fire in the woods created a weather condition which made it impossible to load the cars within the free time.

The Interstate Commerce Commission, January 27, 1909, in conference ruling 135 made use of the following language:

"It is not permissible to provide that demurrage may be refunded or waived in case of inclement weather and leave it to the judgment of some person to determine what constitutes inclement weather. It is permissible to provide that demurrage charges shall be waived or refunded in case of weather interference of such severity as to damage the freight in handling

it into or from the car, or when shipment is frozen so as to prevent or seriously hinder unloading, or when because of flood or high water, or snowdrifts which it is the carrier's duty to remove, it is impracticable to get to car for loading or unloading."

Rule eight (8) of conference ruling 313 of the Interstate Commerce Commission declares:

"The exemptions on account of high water or snowdrifts apply only when the point at which car is placed for loading or unloading is inaccessible to the general public by reason of these conditions."

Even a casual reading of the causes interfering with the accruing of demurrage as set forth in rule 8 of the national car demurrage rules quoted above indicates that each and every one of those causes might well be denominated the act of God, leaving very little to the judgment or machination of man.

If we were to so interpret rule 8 that the carrier and shipper might exercise some judgment as to what would or would not excuse the prompt loading or unloading of railroad cars, it is probable it would open the flood-gate of abuses that prevailed prior to the period of regulation. If we should permit the carrier and the consignors and consignees to exercise their judgment as to the causes for failure to load or unload we would be in no position to police such judgment or the acts flowing from it, and manifold evil would result. Public policy demands that "hard" cases, as well as others, should be controlled by fixed principles.

Wherefore, It Is Ordered, That the petition for reparation be, and the same is hereby, denied.

Commissioners A. A. Lewis and Frank R. Spinning added the following: "Under the rules as they exist, we believe the foregoing order is right, but we are of the opinion that the rules should be broadened to preclude the accrual of demurrage when the loading or unloading of cars is prevented by fire such as the facts indicate in this cause and under similar circumstances."

Upon application duly made, petitioner was allowed until the first day of April, 1919, to initiate proceedings for a review of the foregoing decision, but no further action was taken.

No. 4599.

In re Transportation of Special Agents of the Public Service Commission of Washington Engaged in Investigation of Transportation.

Application by Chicago, Milwaukee and St. Paul Railway Company for permission to cancel charges for railroad transportation furnished special agents of the Commission engaged in investigating trespassing upon railroad trains by persons seeking transportation unlawfully. . Granted.

No. 4768.**Northern Pacific Railway Company, a Corporation, Petitioner, v. Lindstrom-Handforth Lumber Company, a Corporation, Defendant.**

Prayer for settlement of demurrage account between the parties. The defendant company's mill and the track involved are in the vicinity of Rainier, Thurston county, Washington. The petitioner has a spur connected with its siding in this locality, and from the end of this spur the defendant owns and operates track to its mill; and an additional three miles of track extending beyond and to its logging camp. The length of this spur together with the track of the defendant as far as the mill is approximately 800 feet. The custom of the transfer of cars between the parties is for the petitioner to spot incoming cars and pick up outgoing cars on its spur, all movements beyond the spur being accomplished by the defendant. The evidence was that the freight handled over the defendant's railroad was that originating at its logging camp and mill, and that as to its railroad, the defendant was not a common carrier. The parties, in matters of demurrage, were operating under an average agreement which provided a credit of one day for each car released within the first twenty-four hours of free time, and a debit of one day for each twenty-four hours or fraction thereof that a car was detained beyond the free time.

Section I of rule 3, Northern Pacific Railway Company's tariff 1012-E, W. P. S. C. No. 1008, effective November 10, 1915, is as follows: "When cars are interchanged with minor railroads performing their own switching service, handling cars for themselves, or other parties, an allowance of twenty-four hours will be made for switching in addition to the regular time allowed for loading and unloading, time to be computed from the first 7:00 a. m., after cars are placed on interchange track." Section G, rule 3, Northern Pacific Railway Company's tariff 1012-E, W. P. S. C. No. 1008, effective November 10, 1915, is as follows: "On cars to be delivered to interchange tracks of industrial plants performing their own switching service, time will be computed from the first 7:00 a. m. following actual or constructive placement on such interchange tracks until return thereto. Cars returned loaded will not be recorded released until necessary billing instructions are given."

Opinion.

We have carefully considered the cases of joint rates with the Washington Western Railway, 27 I. C. C. 630; the Tap Line Cases, 234 U. S. 1; the Tap Line Case, 31 I. C. C. 490; and the late case of Three Lakes Lumber Company, et al., v. Washington Western Railway Company, et al., 52 I. C. C., page 42, and in the light of these decisions we are compelled to hold that the railroad of the defendant company is not a tap line nor minor railroad, but is, in fact, a plant facility, handling only proprietary freight.

Order.

That a settlement of the demurrage account between the Northern Pacific Railway Company and the Lindstrom-Handforth Lumber Company, for September, 1916, be made under the average agreement existing between said parties, under which freight traffic for said month was handled, apply-

ing thereto section G, rule 3, Northern Pacific Railway Company's tariff 1012-E, W. P. S. C. No. 1008, effective November 10, 1915.

The above order was entered March 21, 1919.

No. 4802.

In re Application of Northern Pacific Railway Company for Classification of Property in the City of Chehalis, Washington, as Operating Property.

The character and use of the property in question having been investigated by the Commission, order was entered as of April 7, 1919, directing its classification as operating property.

No. 4784.

Alger Fowler Company, Complainant, v. Great Northern Railroad Company, James Griffiths & Sons, Seattle-Everett Dock and Warehouse Company, Respondents.

The complaint set forth an alleged lease of the "Oriental Dock," Everett, Washington, owned by the Great Northern Railroad Company, to its correspondents, in contravention of an existing lease with the complainant; also discrimination and threatened damage to the business of the complainant thereby. The answers were denials of the allegations of the complaint, and of the jurisdiction of the Commission over said matters.

After hearing at Seattle, Washington, April 11, 1919, and on motion of the respondent Great Northern Railroad Company, the cause was dismissed, it appearing that "the Great Northern is not a common carrier in the State of Washington, and that the complainant has never offered any grain for shipment over the Great Northern Railway Company or the Railroad Administration, in so far as the Great Northern Railway is concerned."

Note.—This finding was based on the road being under federal control and not subject to Commission jurisdiction.

No. 4687.

J. A. Cheadle and R. N. Clifford, Complainants, v. Port Blakeley Mill Company and Stimson Mill Company, Respondents (with which was consolidated the complaint of F. C. Mathewson v. Port Blakeley Mill Company).

I.

The cause and its disposition are fully set forth in the Findings of Fact and Order entered June 25, 1919.

The Port Blakeley Mill Company is a corporation organized under the laws of the State of California and entitled to do business in the State of Washington.

II.

The Stimson Mill Company is a corporation organized under the laws of the State of Washington and entitled to do business in the State of Washington.

III.

History.

The first road connecting the waters of Puget Sound with the waters tributary to Grays Harbor was the Puget Sound & Grays Harbor Railroad & Transportation Company, which extended from New Kamilche on Totten Inlet, an arm of Puget Sound, to Montesano, on the Chehalis river near that river's confluence with Grays Harbor. This road was constructed about 1890 and operated as a common carrier of both freight and passengers. Failing, it passed into the hands of the old Port Blakeley Mill Company, which company was organized under the laws of California in 1876. There was nothing in the original articles of the Port Blakeley Mill Company authorizing it to do business as a railroad common carrier. In 1900 the articles of incorporation of this company were so amended as to authorize it to become a railroad common carrier.

When the Northern Pacific Railway Company undertook the construction of the railroad connecting the waters of Puget Sound with those of Grays Harbor, it acquired from the old Port Blakely Mill Company that portion of its railroad extending from Montesano to Summit, a distance of some twenty miles. After the Northern Pacific Railway Company acquired the road from Montesano to Summit, the Port Blakely Mill Company continued to operate as a freight road its line from near Summit to New Kamilche. The Port Blakely Mill Company about 1890 built a road known as the Peninsular road, starting at the town of Shelton on Hammersley Inlet, an arm of Puget Sound, westerly into the timber, which finally reached at or near a place called Matlock. From this road, spurs for logging purposes were built into the timber. Later a road was built from Simpson Spur, which is a point a mile northeasterly of Summit, north and west to Matlock where it connected with the Peninsular road. The road extending from Shelton westerly to Matlock was operated as a common carrier.

For three or four years following 1904 there was considerable movement of freight from Shelton over the Peninsular road to Matlock, thence over the road from Matlock to Simpson Spur and thence to the Northern Pacific at Summit, and also reverse movement of freight over said lines. During this period on the Peninsular road trains ran twice a day, and on the Port Blakely road from Matlock south, the service was intermittent.

A car ferry service was established from the town of Shelton, the year not being determinable from the evidence, which took care of freight at Shelton and after the establishment of this service, the Port Blakely Mill Company broke the connection at Matlock between the Peninsular road and the road extending from Simpson Spur to Matlock; and, since such time the rails, from time to time, have been removed from the roadbed from Matlock south and east to the mill of the complainant, which is situated north-erly from the point known as Simpson Spur, a distance of some five miles.

In 1913, the ownership of the stock of the Port Blakely Mill Company having passed into the hands of the interests generally known as Skinner &

Eddy, the articles of incorporation of the Port Blakely Mill Company were again changed by the elimination of the power of the company to act as a common carrier by rail.

IV.

May, 1916, the Port Blakely Mill Company leased to the respondent, the Stimson Mill Company, the Peninsular road and all branches, and the road extending from New Kamilche to Simpson Spur and northerly toward Matlock and the connection at Summit to the Northern Pacific and all branch lines and all rolling stock and equipment; rollways, machine shops, terminals; and the Stimson Mill Company took over the operation of all these properties. This lease was a portion of a deal whereby the Stimson Mill Company had acquired a large amount of stumpage from the Port Blakely Mill Company and the Stimson Mill Company desired the roads to remove the timber so acquired.

The following appears as a portion of article 13 of the agreement and lease between the Port Blakely Mill Company and the Stimson Mill Company:

"In case said Stimson Company is burdened with any obligations accruing through the fact that said railroad has been or may be held to be a common carrier, such burden and obligations shall be assumed by said Stimson Company, and the Blakely Company shall compensate said Stimson Company for the difference between the cost of such assumption and the compensation which it receives otherwise on account of the performance of such burdens and obligations so assumed by it."

V.

At the end of 1916, the complainant, F. C. Mathewson, acquired an old mill site with some improvements for \$1,000 at Cloquallum lake and in 1917 rebuilt at that point, at the expense of \$1,000, a shingle mill having a capacity of 90,000 to 100,000 shingles per day. In April, 1917, said complainant in conjunction with J. H. Stevenson, commenced operating said mill. In March, 1917, the complainant and J. H. Stevenson acquired from the Port Blakely Mill Company all the down and dead cedar in sections 21 and 22, township 19, north of range 5 west, W. M., which land is near Cloquallum lake. In the contract of sale of said cedar, among other things, the following language is used:

"It is understood between the parties hereto that the railroad connecting the shingle mill of said logger with the Northern Pacific Railway, has been leased to the Stimson Mill Company by the said Port Blakely Mill Company, and that the Port Blakely Mill Company does not in any manner guarantee the transfer of freight of any character to the Northern Pacific Railway, or elsewhere, on said railroad, formerly operated by the said Port Blakely Mill Company."

During 1917, from the mill at Cloquallum lake, sixty-seven cars of shingles were moved. During 1918 the director general of railroads would not permit the use of cars for the handling of shingles from said mill, and the output of said mill since the refusal of cars by the director general, has been shipped by auto trucks a distance of ten miles to the Northern Pacific Railway at Craft Siding. When the highway was in fairly good condition the truck used by the complainant would haul per load between 30,000 and

45,000 shingles. In an eight-hour day one truck load can be taken out but by working a little overtime two trips can be made per day. The trucking costs 25 cents per 1,000 and to load and unload costs from \$5.60 to \$6.00 per day. Most of the shingles from the complainant's mill are cut in the summer time. The highway during the summer time is in fairly good condition but in the winter time is practically impassable.

The roadbed and ties from Simpson Spur to the complainant's mill at Cloquallum lake, including several trestles, are in bad condition and to put same in shape for safe operation would entail an expense of upward of \$20,000.00; and, if said line of track were in good condition, it would be necessary, in order to move cars from the Northern Pacific at Summit to complainant's mill and return thereof, to make a special trip with an engine, which would consume at least a half day in the operation.

An apportionment of the taxes on that portion of the road from Simpson Spur to Cloquallum lake is probably \$1,200 per annum and the value of the rails upon said length of railroad, under existing prices, runs into many thousands of dollars.

VIII.

When the down and dead cedar was purchased by the complainant and his partner from the Port Blakely Mill Company, the further operation of the railroad was a matter of discussion and Mr. Stevenson declared that if the road ceased to operate they could take the product of the mill out by auto truck.

Opinion.

We are not unmindful of the fact that the railroads in question have through the years carried generally all freight offered and that they were intended in their inception to perform the office of common carriers. It is apparent, however, that when the Skinner & Eddy interests acquired the holdings of the old Port Blakely Mill Company, by an amendment of the articles of incorporation, they sought to eliminate the common carrier feature of the old business. This effort on their part may have proven futile but for all essential purposes the road from New Kamilche to Summit and from Shelton to Matlock and the connection from Simpson Spur to Matlock were timber road enterprises and were not intended to serve any other purpose than the removal of the timber situated in the locality of these roads. That they freely received and moved those timber products is unquestioned, but, being built for a special purpose and having practically performed such an office, it is not in the line of economy to continue their operations hereafter. The complainant purchased the mill site at Cloquallum lake with knowledge that the connection at Matlock had been broken and several miles of the track removed and the understanding of his partner with the Port Blakely Mill Company was such that neither of them could conclude that the road would be operated to serve only the shingle mill at Cloquallum lake.

It is apparent from all the testimony that should we order a re-establishment of service, this service would cost the Port Blakely Mill Company a sum far in excess of any rate heretofore charged by any line for the movement of this commodity. Thus to order the re-establishment of service would result in the destruction of wealth and the violation of every principle of political economy.

Wherefore, It Is Ordered, That the complaint in the above entitled cause be, and the same is, hereby dismissed.

(Writ of review in the above cause pending in the Superior Court of Thurston County.)

No. 4810.

Wenatchee Northern Warehouse and Marketing Company, a Corporation, Plaintiff, v. Great Northern Railway Company, a Corporation, and Walker D. Hines, Director General United States Railroad Administration, Defendants.

The plaintiff sought the order of the Commission compelling defendants to construct a spur track from the lines of the Great Northern at Peshastin, Washington, to a proposed warehouse that the plaintiff wished to construct on some land which it owned near the industry track of the Great Northern Railway at that place. As a result of a hearing in the matter, the Commission found that the construction of such a spur would bring into railroading at Peshastin a practice contrary to proper operation, and the cause was dismissed July 1, 1919.

No. 4785.

Traffic and Transportation Bureau of the Tacoma Commercial Club and Chamber of Commerce, Complainant, v. Walker D. Hines, Director General of Railroads, United States Railroad Administration, the Northern Pacific Railroad Company, Respondents.

Prayer for relief from action of the director general of railroads, increasing the switching charges at Tacoma, Washington.

In accord with a ruling of the supreme court of the United States by which it was held that the United States Railroad Administration had complete jurisdiction over the matter of rates, the Commission entered its order July 24, 1919, dismissing the cause.

No. 4795.

In the Matter of Switching Rates in Seattle, Washington.

The issue involved was the same as that in cause No. 4785 above, and similar disposition was made by order dated July 24, 1919.

No. 4856.

J. D. Eads and M. M. Platt, et al., Complainants, v. Stimson Mill Company, a Corporation, Respondent.

Messrs. Eads and Platt, as representing certain persons residing along the right-of-way of the logging road of the Stimson Mill Company, in which they asked that the company be adjudged a common carrier and be required

to furnish adequate service at reasonable rates. The Commission found as follows:

I.

That the Stimson Mill Company is a corporation owning, operating and managing a logging railroad in Snohomish county, Washington, the right-of-way or tracks of which road extend from Bryant in Snohomish county to a large growth of timber approximately seven miles northeast from that point.

II.

That J. D. Eads and M. M. Platt and approximately fifty families reside along or near the right-of-way of said logging railway, where they are engaged in building homes and cutting and selling cordwood, cedar posts and other forest products.

III.

That prior to January 1, 1919, the respondent company in connection with its own logging operations switched cars of the Northern Pacific Railway Company over said logging road, for which the complainants paid a switching charge of \$10.30 per car from any point on said line to the town of Bryant.

IV.

That no way-bills or bills of lading were issued by the respondent company, that the charge of \$10.30 was not construed by the patrons as a freight charge, for the reason that they secured their cars from the Northern Pacific Railway Company, and these cars were then picked up on the transfer track by the respondent company.

V.

That all bills of lading and way-bills were issued by the Northern Pacific Railway Company for shipments both intrastate and interstate and that the respondent company had no interests in and took no part in the matter of these shipments other than as mentioned.

VI.

That supplies, such as groceries, etc., were carried over the line for the use of the settlers, but without the consent of the respondent company, the practice being that the brakeman would load and unload the supplies and the settlers would pay him anything they desired in the way of a tip for the service but no charge was ever made by the respondent company for the service and they obligated themselves in no manner to receive or discharge freight.

VII.

That the respondent company did not run any regular trains on its line and only operated its engine or logging cars as its own demands required. The respondent company had no freight or passenger cars of its own, and the movement of the cars for the settlers referred to in the preceding findings were only in connection with a trip of the respondent company's locomotive in its own business.

VIII.

That the respondent company made no charge to any of the complainants for demurrage where a car stood on its track longer than the demurrage limit. The Northern Pacific Railway Company did, however, charge the complainants demurrage.

IX.

That the respondents road is not operated continuously, but for periods of several weeks, and during the winter time is not operated at all.

X.

That the respondent company in the operation of its logging railway is not a common carrier.

July 30, 1919, the Commission denied the prayer of complainants and dismissed the proceeding.

No. 4774.

The Public Service Commission of Washington, ex rel. American Fire Brick Company, v. Great Northern Railway Company, Respondent.

The complaint set forth an overcharge in freight occurring since the control of the United States Railroad Administration. The Commission finding itself without jurisdiction, dismissed the matter August 5, 1919, without prejudice.

No. 4789.

The Public Service Commission of Washington, ex rel. Inland Empire Paper Company, Complainants, v. Great Northern Railway Company and Walker D. Hines, Director General of Railroads, Respondents.

The issue involved was the same as that in cause No. 4774 above, and similar disposition was made by order dated August 5, 1919.

No. 4560.

Cargo Shingle Company and Jamison Mill Company, Complainants, v. Northern Pacific Railway Company, Chicago, Milwaukee and St. Paul Railway Company and Great Northern Railway Company, Respondents.

A full account of the issues and of the initial hearing in this cause will be found in the Report of the Commission for 1918. The order was that during car shortage periods carriers should use a uniform system of rating of the car capacity requirements for the distribution of cars to the shingle mills of Everett, and it was further ordered that they follow the schedule prepared by the Commission. July 25, 1918, complainants filed a petition protesting the order of May 23, 1918, upon the ground that the rating of the mills fixed by the order was unfair and unjust, and asking a rehearing. After a second hearing, the Commission adhered to its former decision, and denied the relief sought in the second petition by order dated August 6, 1919.

ORDERS IN CASES AFFECTING ELECTRIC RAILWAYS

No. 4727.

The Public Service Commission of Washington ex rel. C. H. Falk and Other Patrons, Complainants, v. North Coast Power Company, Respondent.

Proceeding to test the justice of an increase in electric railway rates. Hearing was held October 30, 1918, at Vancouver, Washington. The cause and its disposition are fully set forth in the following

Findings of Fact.

I.

The North Coast Power Company is a corporation organized and existing under the laws of the State of Washington and owns, controls, operates and manages a street railway and interurban railway system for hire in the city of Vancouver, Washington, and vicinity thereof in Clarke county.

II.

On the 20th day of September, 1918, the respondent filed with this Commission W. P. S. C. No. 3, Passenger Tariff No. F-2 canceling W. P. S. C. Tariff No. 2 F-1, increasing the fares on the Sifton line of the respondent's system. Complaint having been filed with this Commission challenging the increases in said Tariff No. F-2, the operation of same was suspended by order of this Commission to November 10, 1918.

III.

Tariffs F-1 and F-2 are as follows:

Tariff F-1.

ONE-WAY CASH FARES.

1. Between any two points within the city limits of Vancouver, Wash., per passenger 5c

2. Between and

Index	Miles	Stations																		
1	0	Vancouver	.....	Wash.	Vancouver															
2	3.35	City Limits	.....	5	City Limits															
3	3.71	Falk	.....	5	Falk															
4	4.36	Stapleton	.....	10	5	5	Stapleton													
5	4.75	Sparks	.....	10	5	5	5	Sparks												
6	5.29	Jaggy	.....	10	10	5	5	5	Jaggy											
7	5.75	Roney	.....	10	10	10	5	5	5	Roney										
8	6.15	Bonzo	.....	(a)15	10	10	5	5	5	5	Bonzo									
9	6.62	Hartfield	.....	15	10	10	5	5	5	5	Hartfield									
10	7.35	Park Way	.....	15	15	10	10	5	5	5	5	5	Park Way							
11	7.50	Orchards	.....	15	15	10	10	10	5	5	5	5	5	Orchards						
12	7.92	Gehr	.....	15	15	10	10	10	10	5	5	5	5	Gehr						
13	8.87	Sifton	.....	15	15	10	10	10	10	10	10	5	5	5	5	Sifton				

3. Fares named above are in cents per single trip.

4. Children under five years of age, accompanied by guardian, will be carried free.

5. Fares named are for continuous passage. No stop-overs allowed.
6. (a) No baggage will be checked on fares named in this tariff.
7. Dogs will be carried on front platform of cars at 15 cents each between any two points within the city limits of Vancouver, Wash., and at 25 cents each between any other two stations, per single trip.
8. Folding go-carts will be carried free between all points. Baby carriages will be carried between any two points within the city limits of Vancouver, Wash., at 15 cents each, and at 25 cents between any other two stations, per single trip.

COMMUTATION TICKETS.

1. School tickets for children under 18 years of age attending school will be sold at rates and between points named below:

<i>Between</i>	<i>and</i>	<i>Book of 44 Tickets per Book</i>	<i>Book of 35 Tickets per Book</i>
Vancouver, Wash.	{ Stapleton Wash.	\$4 00	
	{ Sparks Wash.		
	{ Jaggy Wash.		
	{ Bonzo Wash.		
	{ Hartfield Wash.		
	{ Park Way Wash.	\$5 75	
	{ Orchards Wash.		
	{ Gehr Wash.		
	{ Sifton Wash.		
Within the city limits of Vancouver, Wash.		\$1 40	

2. Tickets are for transportation to and from school on school days between the hours of 7:00 a. m. and 6:00 p. m. They will not be accepted for passage before 7:00 a. m. or after 6:00 p. m., nor on Sundays, holidays or days when schools are not in regular session. Coupons must be detached by conductors.
3. No baggage will be checked on Commutation Tickets.

CHARTERED CARS.

1. Upon the request of at least 25 individuals desirous that a car be run between stations outside the city limits of Vancouver, Washington, later than the then existing schedule calls for, the service asked for will be granted and a round trip ticket issued at the price of twenty-five (25) cents, provided sufficient advance notice be given to the manager and it is the convenience of the company.

Tariff F-2.

ONE-WAY CASH FARES.

1. Between any two points within the city limits of Vancouver, Wash., per passenger 5c

2. Between and

<i>Index</i>	<i>Miles</i>	<i>Stations</i>	
1	0	Vancouver Wash.	Vancouver
2	3.35	City Limits "	5 City Limits
3	3.71	Falk "	10a 5 Falk
4	4.36	Stapleton "	15a 10a 5 Stapleton
5	4.75	Sparks "	15a 10a 5 5 Sparks
6	5.29	Jaggy "	15a 10a 10a 5 5 Jaggy
7	5.75	Roney "	15a 15a 10 5 5 Roney
8	6.15	Bonzo "	20a 15a 10 10a 10a 5 5 Bonzo
9	6.62	Hartfield "	20a 20a 15a 10a 10a 5 5 Hartfield
10	7.35	Park Way "	20a 20a 15a 10 10 10a 5 5 Park Way
11	7.50	Orchards "	20a 20a 15a 15a 15a 10a 10a 5 5 Orchards
12	7.92	Gehr "	25a 25a 20a 15a 15a 15a 10a 10a 5 5 Gehr
13	8.87	Sifton "	25a 25a 20a 15a 15a 15a 15a 10a 10a 5 5 Sifton

3. Fares named above are in cents per single trip.
4. Children under five years of age, accompanied by guardian, will be carried free.
5. Fares named are for continuous passage. No stop-overs allowed.
6. No baggage will be checked on fares named in this tariff.
7. Dogs will be carried on front platform of cars at 15 cents each between any two points within the city limits of Vancouver, Wash., and at 25 cents each between any other two stations, per single trip.
8. Folding go-carts will be carried free between all points. Baby carriages will be carried between any two points within the city limits of Vancouver, Wash., at 15 cents each, and at 25 cents between any other two stations, per single trip.

COMMUTATION TICKETS.

1. School tickets for children under 18 years of age attending school will be sold at rates and between points named below:

Between	and	Book of 44 Tickets per Book	Book of 35 Tickets per Book
Vancouver, Wash.	a Falk Wash.	\$4 00	10a
	a Stapleton Wash.	\$5 75	15a
	a Sparks Wash.		
	a Jaggy Wash.	\$8 00	20a
	a Bonzo Wash.		
	a Hartfield Wash.		
	a Park Way Wash.	\$9 90	22½a
	a Orchards Wash.		
	a Gehr Wash.		
	a Sifton Wash.		
Within the city limits of Vancouver, Wash.....			\$1 70

2. Tickets are for transportation to and from school on school days between the hours of 7:00 a. m. and 6:00 p. m. They will not be accepted for passage before 7:00 a. m. or after 6:00 p. m., nor on Sundays, holidays or days when schools are not in regular session. Coupons must be detached by conductors.
3. No baggage will be checked on Commutation Tickets.

CHARTERED CARS.

1. Upon the request of at least 25 individuals desirous that a car be run between stations outside of city limits of Vancouver, Washington, later than the existing schedule calls for, the service asked for will be granted and a round trip ticket issued at the price of fifty cents (50c) (a) provided sufficient advance notice be given to the manager, and it is the convenience of the company.

Note: "a" denotes advances.

IV.

The line of railway known as the Sifton line of the respondent company extends from the city limits of Vancouver eastward to the station of Sifton, a distance of 5.52 miles from the east city limits, from said city limits into the city of Vancouver a distance of 3.35 miles, making a total length of line of 8.87 miles from Sifton station to the approach of the interstate bridge in Vancouver.

V.

The earnings and expenses of the Sifton line from the city limits to Sifton for 1917 are as follows:

Passenger car miles, 1917.....	262,378	
Freight car miles, 1917.....	8,087	
Total car miles.....	270,465	
Operating expenses		\$40,828 18
Taxes, 1917		2,291 53
Total operating expenses.....		\$43,119 71
Expenses per car mile.....	\$0.159	
Car miles on Sifton line outside of city of Vancouver, Washington	99,685	
Expense to operate Sifton line outside of city.....	99,685 x .159=	\$15,849 91
Earnings on Sifton line outside of city.....		7,756 57
Loss		\$7,093 34

VI.

The earnings and expenses of the Sifton line from the city limits to Sifton, based on first nine months of operation for year 1918, are as follows:

Passenger car miles (9 months, 199,418 miles).....	260,600	
Freight car miles (9 months, 6,780 miles).....	9,050	
Total estimated car miles, 1918.....	269,650	
Estimated operating expenses based on first 9 months' operation.....		\$63,564 01
Taxes		2,291 53
		\$65,855 54
Expenses per car mile based on 9 months' operation...	\$0.244	
Car miles on Sifton line outside of city (9 mo. 81,641)...	108,852	
Expenses to operate Sifton line outside of Vancouver..	108,852 x .244=	\$26,559 88
Earnings on Sifton line outside of city limits (9 months, \$7,711.78).....		10,272 32
Loss		\$16,287 56

VII.

The earnings and expenses of the Vancouver street railway system, including the Sifton line, for years 1917 and 1918 (last three months of 1918 estimated) are as follows:

Month	1917		1918	
	Earnings	Expenses	Earnings	Expenses
January	\$3,584 40	\$3,786 09	\$4,287 49	\$4,092 65
February	3,139 03	3,069 61	4,056 83	3,179 11
March	3,306 83	3,503 46	4,823 21	4,365 09
April	3,310 73	3,021 89	5,150 38	3,924 38
May	3,476 78	3,298 24	5,836 09	4,626 92
June	3,898 53	3,426 86	6,035 47	5,105 20
July	4,457 59	3,659 80	5,961 27	4,950 63
August	4,312 92	3,480 15	5,943 38	6,438 48
September	4,190 53	3,516 99	5,820 34	7,081 55
October	4,686 66	3,179 63	Est. 5,259 66	Est. 6,600 00
November	4,339 05	3,246 19	Est. 5,000 00	Est. 6,600 00
December	4,605 97	3,639 27	Est. 5,300 00	Est. 6,600 00
Totals.....	\$47,309 02	\$40,828 18	\$63,474 12	\$63,564 01

	1917	1918
Passenger earnings	\$40,768 89	\$56,619 50
Freight and mail earnings.....	6,240 13	6,854 62
Gross earnings	\$47,309 02	\$63,474 12
Operating expenses	\$40,828 18	\$63,564 01
Taxes	2,291 53	65,855 54
Earnings over expenses and taxes.....	\$4,189 31	* \$2,381 42
Interest	\$24,000 00	\$24,000 00
Replacement reserve (approximation).....	10,000 00	10,000 00
	\$34,000 00	\$34,000 00
*Deficiency	*\$29,810 69	*\$36,381 42

* Indicates red.

VIII.

The street railway system, including the Sifton line, was appraised as of January 1, 1913, by Thompson and Montague and subsequently checked up by Engineer W. A. White and R. M. Boykin. This appraisal with subsequent additions is as follows:

Appraisal	\$383,259 25
Additions	30,198 18
Total.....	\$413,457 43

IX.

The entire railway system consists of 14.35 miles of trackage, seven motor cars and ten flat cars, also electrical and shop equipment, shop and car houses, station buildings, paving, stores, real estate, etc. The rails are 56 and 60 pounds and cost at time of purchase \$39.00 per ton. The present price is about \$77.00. The item of paving which the company has paid is \$58,644.71. The total value per mile of line is \$28,812.36. Inasmuch as the average cost of street railway systems in the United States is much greater per mile, we will assume for the purpose of this case the value of \$413,457.43 is not high.

X.

The respondent purchases the power for the operation of its system from the Portland Railway, Light and Power Company, delivered at the Portland company's substation in Vancouver. The power being alternating, it is transmitted by the respondent to its car barns and there converted to direct current through its own substation apparatus. The current costs ready for use approximately \$.0115.

XI.

That the comparative wage increase per month of 1918 as compared with the year 1917 is as follows:

	1917		1918	
	Rate per Hour in Cents	Average Monthly Payroll	Rate per Hour in Cents	Average Monthly Payroll
Motormen and conductors.....	28-30c	\$804 58	40-45c	\$1,463 68
Barnmen		290 00		652 66
Track foreman		75 00		107 39
Laborers	28c	193 29	43½c	499 73
		\$1,362 87		\$2,673 46

XII.

That material increases have been along the same general lines as that of wages.

Conclusion.

Under the showing made in this case of the financial operations of the company, we are satisfied that operation cannot be continued under the old rate without embarrassment to the company.

Order.

Under date of November 10, 1918, we permitted Tariff F-2 to become effective.

Wherefore, It Is Ordered, That said tariff be, and the same is, hereby approved.

Witness, The Public Service Commission of Washington, this 18th day of December, 1918.

No. 4718.

Ralph E. Dyar, et al., Complainants, v. Spokane & Inland Empire Railway Company, Respondents.

Protest of increased electric railway rates. Hearing was held September 10, 1918, at Spokane, Washington. The cause and its disposition are fully set forth in the following

Findings of Fact.**I.**

That on the 1st day of August, 1918, respondent filed with the Commission the following supplements to its tariffs:

Supplement 2 to W. P. S. C. No. P. 401;
Supplement 2 to W. P. S. C. No. P. 402;
Supplement 2 to W. P. S. C. No. P. 481;
Supplement 2 to W. P. S. C. No. P. 494;
Supplement 1 to W. P. S. C. No. P. 499;
Supplement 1 to W. P. S. C. No. P. 500;
Supplement 1 to W. P. S. C. No. P. 502;
Supplement 2 to W. P. S. C. No. P. 836;
Supplement 1 to W. P. S. C. No. P. 838; and
Special tariffs W. P. S. C. No. P. 912, 913, 914.

On the same date respondent made application that the rates named therein be permitted to become effective upon one day's notice. Following the solicitation of the federal officials that there should be close relevancy between the federal and state rates, the Commission issued its order No. 3108 permitting the above named supplements to become effective on less than statutory notice and the complainants in this case were notified that hearings upon said tariffs would subsequently be held.

II.

That the approximate result of operations of the Inland division and Vera line of respondent's railway system and of the entire railway system for the years 1915, 1916, 1917 and six months of 1918, is as follows:

		1915	Gain	Loss
Inland Division:				
Passenger revenue		\$194,594 22		
Operating expenses		229,787 23		\$35,193 01
Freight revenue		205,902 48		
Operating expenses		192,612 98	\$13,289 55	
Vera Line:				
Passenger revenue		24,592 59		
Operating expenses		21,330 14	3,262 45	
Freight revenue		5,099 70		
Operating expenses		4,544 98	554 72	
System:				
All revenues		1,188,368 98		
All expenses		1,027,117 16	161,251 82	
Taxes		140,100 00		140,100 00
Interest		455,681 68		455,681 68
Inland Division:				
		1916	Gain	Loss
Passenger revenue		\$181,179 20		
Operating expenses		205,178 80		\$23,999 60
Freight revenue		269,695 97		
Operating expenses		288,635 72		18,939 76
Vera Line:				
Passenger revenue		27,755 40		
Operating expenses		30,017 23		2,261 83
Freight revenue		4,730 76		
Operating expenses		4,666 50	\$64 26	
System:				
All revenues		1,242,005 22		
All expenses		1,187,311 15	104,694 07	
Taxes		113,356 38		113,356 38
Interest		473,569 17		473,569 17
Inland Division:				
		1917	Gain	Loss
Passenger revenue		\$177,115 87		
Operating expenses		214,278 18		\$37,162 26
Freight revenue		235,886 14		
Operating expenses		275,094 63		39,208 49
Vera Line:				
Passenger revenue		27,603 85		
Operating expenses		27,045 43	\$558 42	
Freight revenue		5,102 71		
Operating expenses		5,480 17		377 46
System:				
All revenues		1,226,909 79		
All expenses		1,157,864 72	69,045 06	
Taxes		121,467 64		121,467 64
Interest		497,114 23		497,114 23
Inland Division:				
		Six Months 1918	Gain	Loss
Passenger revenue		\$82,467 29		
Operating expenses		118,970 57		\$36,503 28
Freight revenue		90,300 84		
Operating expenses		116,910 02		26,609 18
Vera Line:				
Passenger revenue		13,647 83		
Operating expenses		17,231 02		3,583 19
Freight revenue		2,043 20		
Operating expenses		3,185 45		1,142 25

All revenues	553,098	44	
All expenses	567,449	37	14,350 93
Taxes			76,420 32
Interest			260,129 32

Analyzing the figures in Finding II, it will be seen that the Inland division has fallen short of earning sufficient revenue to meet bare operating expenses, not including taxes for the years 1915, 1916, 1917 and six (6) months of 1918, in the sum of \$217,615.58.

The entire system has failed to earn operating expenses, taxes and interest during the same period in the sum of \$1,817,198.72.

The situation as to the Vera line is somewhat different. At the hearing Traffic Manager Paine stated that he was preparing a schedule of rates applicable to the Vera line, which would reduce the charge between stations from ten to five cents. This tentative schedule has recently been submitted to the Commission and upon inspection thereof, the Commission finds that certain fares are lowered and others raised over the present schedule. Inasmuch as the hearing in this case was on protest concerning a raise in the present rates over the previous schedule, the Commission does not look with favor upon the tentative schedule submitted as a whole in view of the fact that it increases the present rates, particularly to stations east of station 9, the patrons of whom were not parties to this case and have had no opportunity to be heard.

Wherefore, It Is Ordered, That the respondent file with this Commission supplements to its present tariffs naming the following rates effective ten days from the date of service of this order: .

[illegible]

Witness, The Public Service Commission of Washington, this 6th day
of January, 1919.

No. 4799.

The Public Service Commission of Washington, Complainant, v. Yakima Valley Transportation Company, Respondent.

Proceeding initiated by the Commission to test the reasonableness of a proposed increase in electrical railway fares. Hearing was held March 27, 1919, at Yakima, Washington. The cause and its disposition are fully set forth in the following

Findings of Fact.

I.

The respondent, the Yakima Valley Transportation Company, operates for hire an urban and interurban system in and in the vicinity of Yakima, Washington. Its trackage within the city of Yakima is 17.5 miles and its interurban trackage is 26.7 miles. The company, while in business for a number of years, has never paid dividends. Its total revenues and expenses by years are as follows:

	1915	1916	1917	1918
Revenues	\$138,975 73	\$128,272 13	\$141,358 98	\$144,853 79
Expenses	162,236 71	174,426 53	163,156 08	176,597 60
Loss	23,360 99	46,154 35	21,797 10	31,743 81

II.

Under date of March 25, 1919, said company filed its application with the Public Service Commission of Washington seeking to change cash fares for passengers from five (5) to ten (10) cents, ticket fares from four (4) to eight (8) cents, and school tickets from two and one-half (2½) cents to four (4) cents. In 1918 the number of passengers were as follows:

Cash fare passengers.....	1,058,311
Ticket passengers	40,945
Students	42,502

III.

Prior to the hearing a conference was had between the representatives of the transportation company, the members of the city council of Yakima, including the corporation counsel, members of the Commercial Club, citizens of Yakima and Mr. Ridley, accountant of the Commission, and the question considered at such conference was whether or not the transportation company could continue to operate its cars, urban and interurban, without the following rate of fares: Cash fares, ten (10) cents; ticket fares, eight (8) cents; and school tickets, four (4) cents. At the hearing before the Commission all interested parties expressed themselves in favor of the installation of the foregoing rate, whereupon the Commission announced in open session that it would provisionally permit said rates to become effective at once.

Opinion.

It is apparent from the testimony that the urban and interurban system of the respondent company has not been, and probably will not prove, a

paying venture. It, however, loads in and out from its various stations some thirty-five hundred (3500) carloads of freight per year, mostly fruit, about eight hundred (800) cars of which are delivered to the Northern Pacific Railway Company and the balance to the Oregon-Washington Railroad and Navigation Company, and most of this fruit moves a long distance over the lines of these roads. The Yakima Valley Transportation Company is a subsidiary of the Oregon-Washington Railroad and Navigation Company. How much revenue the parent company receives from the loaded cars delivered to it by the Yakima Valley Transportation Company is not determinable from the evidence, but it is clear from the evidence that should the cars engaged in the carrying of passengers receive without cost trackage privileges, the revenues from passenger fares would not equal the operation of the passenger cars and the expenses incident to the passenger service.

As a Commission, we are not satisfied that the fares of ten (10), eight (8) and four (4) cents will result in greater revenue to the respondent company. We have deemed it advisable, however, under all the circumstances of the case, to permit a try-out of the same.

Order.

Wherefore, It Is Ordered, That for the period of one year, unless otherwise changed by order of this Commission, that the respondent company be allowed to collect of cash-fare passengers, ten (10) cents each; ticket passengers, eight (8) cents each; and students, four (4) cents each.

Witness, The Public Service Commission of Washington, this 9th day of April, 1919.

No. 4805.

Vancouver Commercial Club, Complainant, v. North Coast Power Company, Respondent.

The Commercial Club of Vancouver, Washington, filed its protest against a raise in the street car fares between any two points within the city limits of Vancouver from five cents to seven cents, and challenged the reasonableness of such increase. Hearing was held at Vancouver, Washington, April 21, 1919. The cause and its disposition are fully set forth in the following

Findings of Fact.

I.

The respondent, the North Coast Power Company, is a corporation entitled to do business in the State of Washington, and among other things operates in and in the vicinity of the city of Vancouver, Washington, a system of urban and interurban car lines for hire.

II.

Its lines within the corporate limits of Vancouver approximate about eight miles in length and outside of the city limits six miles in length.

III.

The Public Service Commission of Washington has never made a valuation of the electric lines of the respondent company and fixed a rate base,

but has had occasion, through its engineering and accounting department, to investigate said property and its operating income and expenses by years.

IV.

The respondent company has had an appraisal of its property made by J. L. Stannard, which shows the value thereof, down to and including the year 1918, to be in the neighborhood of \$477,628.00. From the investigation made by our own experts, and based upon their opinion, the value assigned to said property by Mr. Stannard is substantially correct. From the data gathered from the books of the company, some of the opening entries being a fixed amount, the cost of the property as shown by the books of the company, down to and including the year 1918, is \$464,343.24. Owing to the constant losses being incurred by the company in the operation of its urban and interurban system no necessity exists for a valuation and a rate base.

V.

The engineering and accounting department of the Commission has separated the earnings and expenses of the urban and interurban system for the year 1918, with the following result:

INCOME STATEMENT—1918.

	<i>Street Railway</i>	<i>Interurban</i>
Operating revenues	\$49,488 00	\$16,087 07
Operating expenses	45,624 77	18,486 56
Gross income	\$3,863 23	\$2,399 49
Deductions from income:		
Taxes (St. Ry. 64.62%; Inter. 35.38%).....	\$2,006 77	\$1,098 72
Depreciation 3%	8,870 46	4,855 53
Total deductions	\$10,877 23	\$5,954 25
Amount earned	\$7,014 66*	\$7,774 23*
Plant value (N. C. P. Co. appraisal).....	\$295,682 00	\$161,851 00
Rate of return earned.....	2.38*	4.81*

* Denotes red figures.

VI.

In segregating the earnings between the city and the interurban lines, the freight earnings were apportioned 50-50, and general expenses were apportioned on the basis of gross earnings.

VII.

The rates heretofore prevailing for passenger service on the city lines were as follows:

ONE-WAY CASH FARES.

1. Between any two points within the city limits of Vancouver, Wash., per passenger, 5 cents.

3. Fares named above are in cents per single trip.
4. Children five and under twelve years of age will be charged one-half the fare above named, adding where necessary to make fare end in 0 or 5, but not less than 5 cents per single trip. Children under five years of age, accompanied by guardian, will be carried free.
5. Fares named are for continuous passage. No stopovers allowed.
6. (A) No baggage will be checked on fares named in this tariff.
7. Dogs will be carried on front platform of cars at (R) 15 cents each way between any two points within the city limits of Vancouver, Wash., and at 25 cents each between any other two stations, per single trip.
8. Folding go-carts will be carried free between all points. Baby carriages will be carried between any two points within the city limits of Vancouver, Wash., at 15 cents each, and at 25 cents between any other two stations, per single trip.

COMMUTATION TICKETS.

Commutation tickets in books of 50 coupons, each coupon good for one single trip within the city limits of Vancouver, Wash., per book \$2.00.

School tickets for children under 18 years of age attending school will be sold at rates and between points named below.

Within the city limits of Vancouver, Wash., book of 33 tickets, per book \$1.00.

Tickets are for transportation to and from school on school days between the hours of 7:00 a. m. and 6:00 p. m. They will not be accepted for passage before 7 a. m. or after 6 p. m., nor on Sundays, holidays or days when schools are not in regular session. Coupons must be detached by conductors.

No baggage will be checked on commutation tickets.

CHARTERED CARS.

Special chartered cars, for the exclusive use of parties contracting for the service, will be furnished on sufficient advance notice to the manager, and at the convenience of the company, on the following rate basis:

Within the city limits of Vancouver, Wash., \$5.00 per car for the first hour and \$2.50 for each additional hour or fraction of hour car is in service, with a minimum charge of \$5.00 per car.

Between all other stations, full local fare for each passenger carried, subject to minimum charge of \$10.00 per car for one-way trip and \$15.00 per car for round trip.

(A) Advance.

VIII.

Under date of March 21, 1919, the respondent company filed a new tariff, as follows:

P. S. C. W. No. 4

P. S. C. W. No. 3

NORTH COAST POWER COMPANY.

(Vancouver Division)

Local Passenger Tariff No. F-3. Naming One-Way and Commutation Car Fares Between All Stations on Vancouver Lines of North Coast Power Company.

Issued March 20, 1919.

Effective April 20, 1919.

Issued by
R. M. Boykin, Vice President and Gen. Mgr.
Portland, Oregon.

1. Between any two points within the city limits of Vancouver, Wash., per passenger 7c

Index	Miles	Stations
1	0	Vancouver
2	3.35	City Limits
3	3.71	Falk
4	4.36	Stapleton
5	4.75	Sparks
6	5.29	Jaggy
7	5.75	Roney
8	6.15	Bonzo
9	6.62	Hartfield
10	7.35	Park Way
11	7.50	Orchards
12	7.92	Gehr
13	8.87	Sifton

3. Fares named above are in cents per single trip.
4. Children under five years of age, accompanied by guardian, will be carried free.
5. Fares named are for continuous passage. No stop-overs allowed.
6. No baggage will be checked on fares named in this tariff.
7. Dogs will be carried on front platform of cars at 15 cents each between any two points within the city limits of Vancouver, Wash., and at 25 cents each between any other two stations, per single trip.
8. Folding go-carts will be carried free between all points. Baby carriages will be carried between any two points within the city limits of Vancouver, Wash., at 15 cents each, and at 25 cents between any other two stations, per single trip.

1. School tickets for children under 18 years of age attending school will be sold at rates and between points named below:

<i>Between</i>	<i>and</i>	<i>Book of 44 Tickets per Book</i>	<i>Book of 35 Tickets per Book</i>
Any Point in Vancouver, Wash.	Falk Wash.	\$4 00	
	Stapleton Wash.		
	Sparks Wash.	\$5 75	
	Jaggy Wash.		
	Roney Wash.		
	Bonzo Wash.		
	Hartfield Wash.	\$2 00	
	Park Way Wash.		
	Orchards Wash.		
	Gehr Wash.	\$9 90	
	Sifton Wash.		

Within the city limits of Vancouver, Wash.....	\$1 75
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2. Tickets are for transportation to and from school on school days between the hours of 7:00 a. m. and 5:00 p. m. They will not be accepted for passage before 7:00 a. m. or after 5:00 p. m., nor on Sundays, holidays or days when schools are not in regular session. Coupons must be detached by conductors.
3. No baggage will be checked on Commutation Tickets.

Should the new tariff be permitted to go into effect, and there should be no falling off in car patrons, and the operating expenses remain stationary.

the respondent company may be able to earn .67 per cent upon approximately \$464,000.00.

X.

Some of the lines of the respondent company are in bad condition and in the interest of all concerned they should be put in better operating condition.

XI.

The operating expenses of the respondent company appear reasonable and we so find them to be.

XII.

In other street car cases we have set out our reasons for allowance of increases and we see no good purpose to be served in reiterating those reasons.

Order.

Wherefore, It Is Ordered, That the new schedule of rates filed March 21, 1919, to become effective April 20, 1919, be, and the same is, hereby permitted to become effective at once.

Witness, The Public Service Commission of Washington, at Olympia, Washington, this 25th day of April, 1919.

No. 4804.

The Public Service Commission of Washington, ex rel. City of Seattle, Complainant, v. Seattle and Rainier Valley Railway Company, Respondent.

Proceeding initiated by the Commission and joined in by relator, to test the reasonableness of an increase of electric railway fares and a change in the regulations governing the issuance and use of transfers. Hearing held at Seattle, Washington, May 14, 1919. The cause and its disposition are set forth in the following

Findings of Fact.

I.

The Seattle and Rainier Valley Railway Company is a corporation entitled to do business in the State of Washington and is engaged in operating for hire a street car system extending from the center of the city of Seattle to the town of Renton in King county, Washington.

II.

That nine (9) and a fractional miles of the tracks of the said company are within the corporate limits of the city of Seattle and three (3) and a fractional miles thereof are outside of the limits of the said city or between the southern boundary thereof and the town of Renton.

III.

That the reasonable value of the property of said company for rate-making purposes for a so-called rate base has never been determined by the Public Service Commission of Washington.

IV.

That the property constituting said system has been the subject of investigation by the Public Service Commission of Washington and its engineers and accountants and by other engineers, employees of the predecessor of the respondent.

V.

As of June 30, 1914, F. S. Burroughs, then chief engineer of the Public Service Commission of Washington, made an investigation and report to the Public Service Commission as to the cost of reproduction of the property now being operated by the respondent and determined the cost of reproduction to be \$1,171,227.00.

VI.

As of date June 16, 1913, Henry L. Gray, a consulting and valuation engineer who had formerly been employed as the chief engineer of the Public Service Commission of Washington, made an appraisal of said street car system and found that the reproduction cost of the property as of March 1, 1913, was \$1,760,310.00.

VII.

In 1918, Mr. D. F. McCurrach, acting chief engineer of the Public Service Commission of Washington, and C. A. Cadden, assistant engineer of said Commission, brought down to date the cost of reproduction of the property of the Seattle and Rainier Valley Railway Company (formerly known as the Seattle, Renton & Southern Railway Company) by additions to property, using Mr. Burroughs' reproduction cost, and found the cost of reproduction to be \$1,425,075.65, and in so doing deducted retirements and nonoperating property.

VIII.

As of December 31, 1918, Mr. E. D. Ridley, accountant of the Public Service Commission of Washington, from the books of the Seattle and Rainier Valley Railway Company, determined net additions to property subsequent to the report of Acting Chief Engineer D. F. McCurrach, and found the cost of reproduction of the property of the respondent company to be \$1,449,466.34.

IX.

The Commission is satisfied that it would cost to reproduce the property of the respondent company, under normal conditions, a sum exceeding a million and a quarter dollars.

X.

From the report of Mr. Ridley the following income statement is taken and the same shows the average plant investment as taken from the books of the respondent company and its predecessor:

INCOME STATEMENT.

1918							
	Total	January	February	March	April	May	June
Railway operating revenues.....	\$350,126 82	\$26,690 87	\$24,848 39	\$27,837 01	\$28,074 06	\$29,803 15	\$30,599 54
Railway operating expenses.....	263,167 38	19,578 04	20,082 82	19,524 47	18,577 17	20,478 96	21,386 21
Net operating revenues.....	\$86,959 44	\$7,102 83	\$4,815 57	\$8,312 54	\$9,496 89	\$9,324 19	\$9,214 33
Taxes	\$31,411 65	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64
Depreciation, 8%	43,118 15	3,563 18	3,563 18	3,563 18	3,563 18	3,563 18	3,563 18
Total deductions	\$74,529 80	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82
Gross income	\$12,429 64	\$892 01	\$1,895 25*	\$2,101 72	\$3,286 07	\$3,113 37	\$3,003 51
Average plant investment.....	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50
Rate per cent. earned.....	.87	.74	1.16*	1.75	2.74	2.59	2.50
Operating Ratio— Expenses to earnings, per cent.....	75.16	73.38	80.62	70.14	66.13	68.71	69.89

* Indicates red figures.

Extraordinary per cent. loss December, 1918, due to bookkeeping adjustments.

INCOME STATEMENT—Concluded.

	1918						1919	
	July	August	September	October	November	December	January	February
Railway operating revenues.....	\$31,911 66	\$32,346 14	\$30,639 81	\$27,091 19	\$28,955 73	\$30,339 27	\$29,335 59	\$22,775 68
Railway operating expenses.....	21,511 52	22,613 03	21,663 73	22,210 87	23,196 59	32,159 93	25,830 33	20,543 52
Net operating revenues.....	\$10,400 14	\$10,733 11	\$8,976 08	\$4,880 32	\$5,759 14	\$2,250 66*	\$4,005 26	\$2,232 16
Taxes	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64	\$2,617 64
Depreciation, 3%	3,593 18	3,593 18	3,593 18	3,593 18	3,593 18	3,593 18	3,593 18	3,593 18
Total deductions	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82	\$6,210 82
Gross income	\$4,389 32	\$4,517 29	\$2,765 26	\$1,330 50*	\$451 63*	\$3,461 45*	\$2,288 24*	\$4,011 34*
Average plant investment.....	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50	\$1,437,271 50
Rate per cent. earned.....	3.66	3.76	2.30	1.11*	.88*	7.05*	1.57*	3.34*
Operating Ratio— Expenses to earnings, per cent...	66.78	67.83	70.70	81.99	80.11	107.41	86.34	90.19

* Indicates red figures.
Extraordinary per cent. loss December, 1918, due to bookkeeping adjustments.

XI.

The wages being paid the motormen and conductors of the respondent company are less than the wages paid for like services by the city of Seattle in the operation of its municipal lines, and respondent's employees are demanding an increase of wages that they may be paid for their services sums comparable with those being paid similar employees of the municipality.

XII.

The respondent has applied to the Public Service Commission of Washington to increase its fares within the city of Seattle substantially as follows:

Adults, from 5c to 6c for single ride.

School tickets, from 2½c to 3c.

Tickets carrying the right of transfer, from 5c to 7c.

Opinion.

The road of the respondent company is a necessity and serves a useful public purpose in carrying passengers in and in the vicinity of the city of Seattle. It should be properly maintained as a public agency and the employees of the company should receive wages commensurate with the times and comparable with those deemed reasonable by the city of Seattle in like line of employment.

Order.

Wherefore, It Is Ordered, That the following schedule of rates of the respondent company be, and the same is, hereby approved to become effective as of June 1, 1919:

ZONE ONE—WITHIN PRESENT SEATTLE CITY LIMITS.**Fares.**

Continuous Trip: 1. Passengers over 6 years of age and children under 6 years of age occupying seats required by other passengers or when traveling alone..... 6c

Within present Seattle limits on Seattle and
Rainier Valley Railway Company.

Cash: 2. Tickets in sheets or books of 20 coupons good if detached, unlimited.....per book \$1.20

Commutation: 3. School tickets in books of (30) thirty coupons, good only for children attending public schools subject to conditions named in Rule No. 10..... 90c

Transfers.

4. Transfers TO The Puget Sound Traction, Light and Power Company connecting lines, and Seattle Municipal connecting lines will be issued by conductors upon payment of one cent transfer charge in addition to each tariff fare, as indicated above, subject to conditions as set forth in Rule No. 8. The Seattle and Rainier Valley Railway Company will retain as its share of each full fare and transfer charge the sum of 4½c, and will retain as its share of each school ticket fare upon which it issues a transfer the sum of 1¾c..... 1c

5. Transfers FROM the Puget Sound Traction, Light and Power Company connecting lines, and Seattle Municipal connecting lines, will be accepted if tendered with two cents transfer charge, subject to conditions as set forth in Rule No. 7. The Seattle and Rainier Valley Railway Company shall receive from the connecting lines the sum of $2\frac{1}{4}$ c for each full fare transfer and $1\frac{1}{4}$ c for each school ticket transfer accepted from such line, and will retain the 2c transfer charge herein provided for on each full fare transfer..... 2c
6. Children under 6 years of age when accompanied by an adult, when not occupying seats required by other passengers Free

Transfer Rules:

Governing
Transfers
Accepted.

7. 1. Each transfer (full fare) issued to this line by the Puget Sound Traction, Light and Power Company connecting lines on cars operated exclusively within the limits of the city of Seattle, also every such transfer issued on cars of the Municipal connecting lines, owned by the city of Seattle, will be accepted as fare: Provided, Two additional cents be tendered with such transfer. No additional charge will be made on school ticket transfers.
2. That such transfers be correctly and properly punched in every detail by the issuing line.
3. That such transfers be presented by the identical person to whom originally issued.
4. That such transfers be presented at the exact place of transfer punched thereon by the issuing line.
5. That such transfers be presented on the first connecting car of the company to arrive at the designated transfer point after the issue of such transfer. (By first connecting car is meant the first car of this company arriving at the transfer point which will directly reach the passenger's destination on this line.)

Covering
Transfers
Issued.

8. 1. Passengers entitled to transfers: Transfers to Puget Sound Traction, Light and Power Company connecting lines and Seattle Municipal connecting lines will be issued by conductors of this company on payment of cash fare or revenue tickets described in items 1, 2 and 3, upon payment of one cent additional to regular fare provided in items 1 and 2. No additional charge will be made for school ticket transfers.
2. **Emergency:** Emergency transfers will be issued when necessity arises due to interruption of service (or to any disability of the company). Also to passengers unintentionally boarding wrong cars. Such transfers must be punched, in space provided, marked "Emergency."
3. **Transfers Issued on Transfers:** Transfers will not be issued on transfers except at Genesee Junction.
4. **Punching on Time:** Transfers will be punched to indicate the time of arrival at transfer point.

5. **Time Limit:** Transfers issued by this company will be honored only at proper transfer point and only on the first connecting car of the line indicated by punch mark.
6. **Time and Place of Issue:** No transfer will be issued unless request is made to conductor immediately at time of paying fare.
- Exception:** No transfer will be issued to any passenger traveling on any ticket other than described in items 1, 2 and 3, except in case of emergency and then only to another car of this company as provided under article 2 above.
- Special Cars:** 9. Special or chartered cars for exclusive use of contracting parties over lines of the Seattle and Rainier Valley Railway Company will be furnished on sufficient notice to the general manager when equipment is available and does not interfere with operation of regular service at following rates—\$7.50 for first hour and \$3.00 for each hour continuous service thereafter. No charges, however, to be less than \$7.50 single trip and \$10.00 round trip.
- Lap Dogs:** A small dog, carried in lap of passenger, will be considered a "lap dog," for which no fare will be collected. Such dogs not allowed in seats.
- Dogs Other Than Lap Dogs:** Fare each 6c
Such dogs will not be carried, however between the hours of 7:00 and 8:30 a. m. and 4:30 and 6:30 p. m. on week days. Must be carried on front platform on cars so equipped, or in rear end of center entrance cars.
- Hand Baggage:** Such as suit cases, grips, valises, telescopes, also small packages not too large to be carried on lap of passenger, must be looked after by passenger, and will be at owner's risk of loss or damage..... Free
- School Tickets:** 10. School tickets as indicated in item 3 are issued by the company only at its main office at Columbia Station, upon presentation of identification cards or certificates signed by parent, school teachers and principal. Each ticket is good when certification or identification card is shown upon presenting ticket for a single fare, for any school child on any regular car of the Seattle and Rainier Valley Railway Company within the Seattle city limits between the hours of 8:00 a. m. and 4:30 p. m., but not otherwise unless by special permit. These tickets are not transferable, and each student must be provided with an individual book of tickets for his or her own individual use.
- The loss of a certificate must be reported to the principal of the school attended, and by him to the auditor of company before another certificate will be issued.

ZONE TWO.

- Single Fare:** District served by the company's lines between the present southern city limits at 75th street and the town of Bryn Mawr, including Bryn Mawr.
- Between any point in zone one (Seattle) and Bryn Mawr either direction 10c
- Between 75th street and Bryn Mawr, either direction.... 5c
- (No stop between 75th street and Bryn Mawr.)

ZONE THREE.

Single Fare:	District served by the company's lines between Byrn Mawr and the southern terminus of the company's lines in the city of Renton, present stops at Burroughs Siding, Buffalo Station, Earlington and Renton.	
	Between any point in Zone One (Seattle) and any point in Zone Three	15c
	From 75th street to any point in Zone Three.....	10c
	Between any two points in Zone Three.....	5c
Round Trip Fare:	Renton round trip tickets are sold by the company good for one round trip over company's line between any point in Zone One (Seattle) and any point in Zone Three	25c
	Does not entitle purchaser or holder to transfer to other lines in either direction.	

Witness, The Public Service Commission of Washington, this 23rd day of May, 1919.

No. 4827.

The Public Service Commission of Washington, Complainant, v. Tacoma Railway & Power Company, a Corporation, Respondent.

Pursuant to a washout on its line between Summit and Puyallup, respondent discontinued service between these points. The Commission instituted this proceeding to determine whether service should be restored. Hearing was held at Puyallup, Washington, May 29, 1919. The cause and its disposition are set forth in the following

Findings of Fact.

In 1889 and 1890 a narrow gauge road was constructed from Tacoma to Puyallup over the hill by way of Summit, which road has been commonly known as the Old Puyallup line. Its cars were drawn by steam dummies and the fare was twenty cents each way. The company building this line failed and the property was taken over by the Stone-Webster interests in 1902, rebuilt and electrified. In 1908 the Stone-Webster interests built another road to Puyallup called the Short Line, running through the Puyallup valley, and that the bulk of through travel from Puyallup to Tacoma was diverted to this new line.

On the 20th day of January, 1918, the tracks of the Old Puyallup line were washed away by a flood at a point about 2.7 miles from the city of Puyallup, rendering the operation of said line from the city of Puyallup, impossible. Within said 2.7 miles there are several extensive trestles, some of which are in very bad state of repair and without a large expenditure of money it would be impracticable and dangerous to operate cars thereover.

Complaint has been made to the Commission by the residents along the Old Puyallup line, beyond Summit, and by many of the people of Puyallup, requesting restoration of service on said line; and, the Tacoma Railway & Power Company, which owns said line, wishes to discontinue its operation from Summit to Puyallup.

Through our engineering and accounting departments, we have made an examination of the line and investigated its income and, from the evi-

dence, it appears that along the 4.7 miles of track of line between the station known as Summit and the valley where the line leads out to Puyallup, the country is sparsely populated while the territory lying between the city limits of Tacoma and Summit is rather well settled; that between Summit and Puyallup there is a difference in elevation of 435 feet with an average grade of 4.4 per cent along the line where it descends into the valley near Puyallup.

The Tacoma Railway & Power Company owns and operates a street car system in and in the vicinity of the city of Tacoma and several suburban lines from Tacoma to nearby communities. The system, as a whole, has made large losses and none of the suburban lines have been able to make operating expenses, including depreciation, the Old Puyallup line earning next to the lowest of all the lines operated by the respondent company. The cost of operating the Old Puyallup line for the last six months of 1918, as close as can be determined, is as follows:

Maintenance of way and structures, 163,943 car miles at 6.5c.....	\$10,656 30
Maintenance of equipment, 163,943 car miles at 3.5c.....	5,738 00
Power, 163,943 at 4.5c.....	7,377 44
Trainmen's wages, 14,613 car hours at \$1.06.....	15,782 04
Other transportation expenses, 163,943 miles at 3.3c.....	5,410 12
Injuries and damages (actual cost).....	1,908 77
General and miscellaneous expense, 163,943 miles at 2.5c.....	4,098 58
Taxes (actual gross earnings and as assessed for district between Fern Hill and Puyallup).....	4,999 46

Total operating expenses..... \$55,970 71

while the income for the same period was \$45,891.18, showing a loss of \$10,079.53, and these figures allow nothing for depreciation. This condition exists after the line has been in operation for 28 years. The greatest loss in operation of the Old Puyallup line was incurred between Summit and Puyallup. The Valley line between Tacoma and Puyallup also fails to earn money.

Opinion.

The outlook for traction properties in the United States is gloomy. The competition of the automobile is their undoing. It is undoubtedly true that it costs more per mile to carry a passenger by automobile than in a steam or electric carriage. The automobile, however, is a popular mode of travel and probably will continue so. The advent of the automobile, in many instances, but duplicates traveling facilities and economic loss is the result. Is it the part of wisdom to continue these losses longer than is necessary? Much is said in the evidence about persons beyond Summit acquiring their property because of street car transportation and the berry farmers about Puyallup are very insistent that the line shall be operated from Summit to Puyallup that the residents along this line may go into the valley and pick berries. While these claims are potent, are they controlling? Do they not in fact run counter to the progress of the world?

The steamboat eliminated the sailing craft and in so doing disturbed many relationships. The steam railway, to a large extent, destroyed the freighters and insignificant communities became commercial centers and other commercial centers off the line of rail, decayed. The electric light eliminated the gas jet; the change disturbed many. The electric line cut

into the revenues of the steam line but greatly broadened the area of cities. These changes while detrimental to some, on the whole, are beneficial. The advent of the auto car and truck is one of the most revolutionary factors in the progress of our people. It will inconvenience many, but the mass, in all probability, will be greatly benefited.

Is it not the part of wisdom to adjust ourselves as rapidly as possible to each new condition? The struggle to survive the contest brought about by new inventions too often results in unnecessary waste.

We are firmly convinced that the only hope of traction properties is curtailment; all unnecessary mileage must be eliminated. The dense traffic and a low fare may sustain some of them. We are convinced that they can not operate in a sparsely settled country with high fares.

Under the circumstances, we can see no justification for the re-establishment of service between Summit and Puyallup; in fact, we believe that the discontinuance of service between Summit and the point of wash-out, under all the circumstances in this case, is legitimate. We have been informed that the respondent company is willing to give over the right-of-way between Summit and Puyallup that a highway may be built thereon. We are quite sure that in the years to come such a highway will be of greater service than a traction line giving infrequent service.

Order.

Wherefore, It Is Ordered, That the respondent be allowed to discontinue all service between Summit and Puyallup, and that the prayer of the petitioners that service be restored to Puyallup be, and the same is, hereby denied.

Witness, The Public Service Commission of Washington, this 16th day of July, 1919.

No. 1878.

The Public Service Commission of Washington, Complainant, v. Puget Sound Traction, Light and Power Company, Respondent.

Prior to March 12, 1915, the Commission determined to ascertain the value of the respondent's property within the state, and on that date gave notice of a hearing to be held for the purpose. Change in ownership of some of the property involved intervened, and the Commission subsequently entered the following order:

This cause coming on for hearing and it appearing to the Commission that the Commission did heretofore undertake the valuation of the traction and power properties of the Puget Sound Traction, Light and Power Company in Seattle and vicinity, and it further appearing to the Commission that the street car system of respondent in the city of Seattle has been purchased and taken over by the city of Seattle, and it further appearing to the Commission that the work done by this Commission is so interwoven with the property taken over by the city with the property remaining with the said respondent, that the work of separation would be as great as a new valua-

tion of the remaining property owned and controlled by the respondent, and the Commission having no jurisdiction over the property purchased by the city,

It Is Therefore Ordered, That the above entitled cause of valuation be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 18th day of July, 1919.

No. 4700.

J. C. Byrd v. Washington Water Power Company.

No. 4709.

F. E. Elmandorf v. Washington Water Power Company.

No. 4788.

B. R. Ostrander, et al., v. Washington Water Power Company.

These causes all involved abandonment of street railway service in the city of Spokane, and were therefore consolidated for hearing and disposition. Testimony was taken at a hearing in Spokane, and subsequently the Commission entered the following:

The Commission having heretofore taken testimony in the above entitled actions relative to the number of passengers carried on the lines, the operations of which have been discontinued by the respondent company, and having requested a check to be kept on the lines now in operation and a graphic chart prepared showing such traffic, and believing it to the interest of all concerned that traffic should be restored on the lines heretofore operated and a proper check kept thereon and charted that the Commission may be more closely advised as to the proper final order to be made; now, therefore, as an Interlocutory Order only,

It Is Ordered, That the Washington Water Power Company, respondent herein, forthwith restore service to the same extent as maintained immediately prior to the discontinuance of service thereon upon the following lines, to-wit, being the service questioned in these proceedings including that part of Maple street between Fifth avenue and Fourteenth avenue known as the South Maple line; on the car line from Baldwin avenue via Hamilton street and Boone avenue to the city; also on what is known as the Minnehaha line; and on Second avenue from Howard street to Fourth avenue and Maple street; and that said service continue until further order of this Commission; and

It Is Further Ordered, That the traffic study already begun be continued and charted under the direction of an agent of this Commission.

Witness, The Public Service Commission of Washington, this 20th day of January, 1919.

Final disposition of the cases was by order as follows:

This cause coming on to be heard this 5th day of August, 1919, and it appearing to the Commission that the services complained of have been restored, and that negotiations are pending towards a consolidation of the

properties of the Washington Water Power Company and the Inland Empire Railway Company,

It Is Ordered, That these causes be, and the same are, hereby dismissed.

Witness, The Public Service Commission of Washington, this 5th day of August, 1919.

No. 4841.

Town of Stellacoom, a Municipal Corporation, Complainant, v. Pacific Traction Company, a Corporation, Respondent.

The respondent filed with the Commission its tariff No. 4, supplement No. 6, seeking an increase in passenger fares on all of its lines outside the city limits of Tacoma. Hearing was held at Stellacoom, Washington, August 28, 1919. The Commission thereafter entered the following Findings and Order:

I.

That the Pacific Traction Company is a corporation owning, operating, managing and controlling city and suburban street car lines in the city of Tacoma and between Tacoma and Murray and American Lake north and between Tacoma and Stellacoom, and is a common carrier, engaged in the transportation of passengers and property, for hire, in the State of Washington.

II.

The following table shows the detailed fares including a seven-cent fare within the city limits of Tacoma to all points on respondent's line as now charged:

<i>Miles from Ninth and "C" Street</i>	<i>Stations</i>	MAIN LINE (TACOMA).																	
0.0	.....	Tacoma																
7.1	Calvary Cemetery (City Limits).	7	Calvary Cemetery																
7.7	Flett	12	5	Flett															
8.4	Lochburn	12	5	5	Lochburn														
8.8	Lakewood	12	5	5	5	Lakewood													
9.4	DeKoven	12	5	5	5	DeKoven													
10.0	Clover Park	12	5	5	5	5	Clover Park												
11.0	Linwood	17	10	10	10	5	Linwood												
11.6	Country Club	17	10	10	10	5	5	Country Club											
14.0	Murray	17	10	10	10	5	5	5	Murray										
STELLACOOM BRANCH.																			
6.5	Manitou	7	..	5	5	5	5	10	10	10	Manitou								
8.4	Lochburn	12	5	5	..	5	5	10	10	10	5	Lochburn							
9.1	Lower Custer	12	5	5	5	5	5	10	10	10	5	Lower Custer							
10.5	Asylum	17	10	10	10	10	10	15	15	15	10	5	Asylum						
12.6	Stellacoom	17	10	10	10	10	10	15	15	15	15	10	5	Stellacoom					
LAKE CITY BRANCH.																			
10.0	Clover Park	12	5	5	5	5	5	5	5	5	10	10	Clover Park						
10.6	Interlaken	17	10	10	5	5	5	5	10	10	10	5	10	15	5	Interlaken			
10.9	Arkley	17	10	10	5	5	5	5	10	10	10	5	10	15	5	5	Arkley		
11.0	Sherwood	17	10	10	10	5	5	5	10	10	10	10	10	15	5	5	5	Sherwood	
11.0	Lake City	17	10	10	10	10	5	5	10	10	10	10	10	15	5	5	5	Lake City	
12.3	American Lake (North)	17	10	10	10	10	5	5	10	10	10	10	10	15	5	5	5	5	American Lake (North)

III.

The following table shows the detail of fares including the seven-cent fare within the city limits to all points on respondent's line under the proposed increased schedule:

		MAIN LINE (TACOMA).	
Miles from Ninth and "C" Street	Stations		
0.0	.....	Tacoma	
7.1	Calvary Cemetery (City Limits) ..	7	Calvary Cemetery (City Limits)
7.7	Flett	14	7 Flett
8.4	Lochburn	14	7 Lochburn
8.8	Lakewood	14	7 7 Lockwood
9.4	DeKoven	14	7 7 7 DeKoven
10.0	Clover Park	14	7 7 7 7 Clover Park
11.0	Linwood	21	14 14 14 7 7 Linwood
11.6	Country Club	21	14 14 14 7 7 7 Country Club
14.0	Murray	21	14 14 14 7 7 7 Murray
STELLACOOM BRANCH.			
6.5	Manitou	7	7 7 7 7 14 14 14 Manitou
8.4	Lochburn	14	7 7 7 7 14 14 14 5 Lochburn
9.1	Lower Custer	14	7 7 7 7 7 14 14 14 5 Lower Custer
10.5	Asylum	21	14 14 14 14 14 21 21 21 14 5 Asylum
12.6	Stellacoom	21	14 14 14 14 14 21 21 21 14 5 Stellacoom
LAKE CITY BRANCH.			
10.0	Clover Park	14	7 7 7 7 7 7 7 7 14 14 Clover Park
10.6	Interlaken	21	14 14 7 7 7 7 14 14 14 7 14 21 21 7 Interlaken
10.9	Arkley	21	14 14 7 7 7 7 14 14 14 14 21 21 7 7 Arkley
11.0	Sherwood	21	14 14 14 7 7 7 14 14 14 14 21 21 7 7 Sherwood
11.0	Lake City	21	14 14 14 14 7 7 14 14 14 14 21 21 7 7 Lake City
12.3	American Lake (North)	21	14 14 14 14 7 7 14 14 14 14 21 21 7 7 American Lake (North)

IV.

The following table shows the operating expenses, operating revenues, taxes, depreciation, net income, average plant value and the annual rate of return earned. This table shows for the first six months of the year 1919, an annual loss in the rate of return of 5.76 per cent.

	INCOME STATEMENT.			
	1916	1917	1918	6 Months 1919
Operating revenues	\$86,284 82	\$121,979 93	\$201,948 85	\$80,978 73
Operating expenses	79,394 94	91,112 89	152,416 01	86,572 18
Operating income	\$6,889 88	\$30,858 04	\$49,532 84	* \$5,593 45
Taxes	5,178 81	5,090 84	7,630 41	3,999 92
Gross income	\$1,711 07	\$25,767 20	\$41,902 43	* \$9,593 37
Depreciation 3%	19,909 02	20,541 54	20,741 25	10,392 36
Net income	* \$18,197 95	\$5,225 66	\$21,161 18	* \$19,985 73
Average plant value.....	\$663,634 00	\$684,718 00	\$691,375 00	\$692,824 00
Annual rate of return earned	* 2.74%	0.76%	3.06%	* 5.76%

* Indicates red figures.

V.

The statement in the preceding findings shows an earning of 3.06 per cent in the year 1918, which is accounted for by the heavy traffic over respondent's lines occasioned by the large number of troops stationed at Camp Lewis, which is tributary to Murray. The Commission will take knowledge of the fact that the number of troops stationed at Camp Lewis during the year 1918 have been almost depleted and that very little traffic can be expected in the future from that source. There is no indication that the other points on the respondent's lines outside of the city limits of Tacoma will develop to such an extent that the respondent can hope to receive the same amount of traffic, in the near future, as obtained in 1918.

VI.

The item of conducting transportation expense, the principal part of which is composed of trainmen, motormen and conductor's wages, amounted to \$0.0628 per car mile for the first six months of 1918, and \$0.0989 for the second six months, and for the first six months of 1919 it was \$0.1029 per car mile. This is the principal item of operating expense and indicates the general trend of upward costs of operation, and so far as this Commission is advised, there is no immediate likelihood of a discontinuance of this rate of increase.

VII.

The prices of materials used by the respondent and other utilities in the maintenance and upkeep of their properties have advanced along similar lines to those of wages.

VIII.

The plant value used in Findings No. 4 was a value fixed by the Public Service Commission of Washington as of December 31, 1915, with additions and betterments brought down to June 30, 1919, by the Commission's engineers.

IX.

After paying operating expenses and taxes and allowing for depreciation, the returns to the respondent company show a deficit of \$19,985.73 for the six months' period from January to June, 1919, which under a continuation of the amount of traffic, etc., as it existed during those six months, would give an annual deficit of \$39,971.46. The estimated revenues to be derived from the increase in the proposed rates would yield the company an annual increase over their present receipts or income of \$24,527.12.

X.

That the amount of increase sought by the proposed rates is necessary to pay operating expenses.

XI.

That the respondent should issue commutation books at a less rate than is charged for cash fares. That these commutation books should provide a six-cent fare for each zone outside of the city limits of the city of Tacoma, and that the cash fares should be nine cents for each zone outside of the city limits of the city of Tacoma.

From a consideration of all of the testimony and the foregoing findings, the Commission makes the following

Order.

It Is Hereby Ordered, That the respondent company publish and file with this Commission its tariffs providing for a fare of nine cents in each zone outside of the city limits of the city of Tacoma and that it also in said tariff provide for a commutation book of not to exceed thirty rides, and under such reasonable rules and regulations as the respondent company may adopt, to be restricted to the use of bona fide members of families and to be sold at a rate equal to six cents for each zone outside of the city limits of the city of Tacoma.

It Is Further Ordered, That this Order shall be and remain in force and effect for a period of ninety days from and after September 27, 1919.

It Is Further Ordered, That the respondent company during such ninety-day period, furnish the Commission a weekly statement showing the number of passengers carried, segregated as between cash fares and tickets, and the amount of revenue derived from each.

Witness, The Public Service Commission of Washington, this 26th day of September, 1919.

No. 4796.

**The City of Spokane, a Municipal Corporation, Complainant, v. The
Washington Water Power Company, a Corporation,
Respondent.**

Respondent sought to increase its fares applying on the street railway system within the city of Spokane. The findings and order were as follows:

I.

The respondent, the Washington Water Power Company, is a common carrier of the State of Washington and as such operates for hire a street car system in the city of Spokane.

II.

That on the 21st day of February, 1919, said company filed with the Public Service Commission of Washington a schedule of rates relative to the handling of passengers on its street car system in Spokane, to become effective March 25, 1919, by which it sought to increase its rates over the rates then in effect as follows:

Cash fares, for adults and children (other than school children)
over five years, from 5 cents to 7 cents.
School tickets, 22 for \$1.00 to 40 for \$2.40.
Transfers, 0 to 1 cent.

III.

The Public Service Commission of Washington has never determined the rate base for the traction properties of the respondent company in Spokane; it has, however, through its engineering and accounting departments, made a full investigation, and the data of such investigation is on file with the Public Service Commission, and from the same we gather the following:

	<i>Book Cost</i>	<i>Cumulative Book Cost</i>	<i>Cost of Reproduction and Additions by Years</i>	<i>Cumulative Cost of Reproduction With Additions</i>
December 31, 1915.....	\$4,044,170 16	\$4,044,170 16	\$4,838,171 00	\$4,838,171 00
December 31, 1916.....	13,408 97	4,057,579 13	13,408 97	4,851,580 00
December 31, 1917.....	35,190 40	4,092,769 53	35,190 40	4,886,770 00
December 31, 1918.....	30,062 23*	4,062,707 30	30,062 23*	4,856,708 00

* Indicates red figures.

IV.

The gross earnings and expenses of the respondent company, as to its traction properties in Spokane, by years, is as follows:

Earnings, 1915	\$668,561 66
Expenses, 1915	694,032 76
Earnings, 1916	668,946 20
Expenses, 1916	719,228 23
Earnings, 1917	769,140 74
Expenses, 1917	737,496 61
Earnings, 1918	732,826 91
Expenses, 1918	756,827 02

V.

In 1915 the respondent company lost in its traction business .63 of one per cent. In 1916, 1.24 per cent. It gained in 1917, .77 of one per cent. It lost in 1918, .60 of one per cent.

VI.

The respondent company owns and operates a large hydro-electric system and from this system it furnishes its traction properties current for use on its traction wires at six mills per kilowatt-hour.

Opinion.

There are being operated in the city of Spokane two traction systems, one the property of the respondent and one belonging to the Spokane & Inland Empire Railroad Company, the result of which is duplication of service in said city. It is estimated that should there be a consolidation of these two properties 20 per cent of the trackage can be eliminated and a large saving made in the operation of the two systems as one. Much stands in the way of consolidation; both properties are encumbered, which necessitates the meeting of many minds, and probably a new franchise for a consolidated system, which may call for a change in the charter of the city of Spokane. We believe, however, that the common sense of all concerned will lead to the accomplishment of the foregoing.

The advent of the automobile has revolutionized the transportation of passengers, most noticeably in our centers of population. It is probable that if it were not for the automobile the traction companies would be carrying double the passengers that they are now handling and the load would be more evenly distributed throughout the day than under present conditions. If private companies are to continue to operate traction properties relief of some sort must be had. It is apparent that in the city of Spokane even the consolidation of the traction properties will not be sufficient to overcome the losses being incurred, on a nickle fare.

No company operating a traction system in Spokane can grant free rides, pave between its tracks and a foot on either side thereof, pay an occupation and bridge tax, and survive on a five-cent fare, and it is probable that under present conditions, with all these burdens removed, a five-cent fare will not provide sufficient revenue.

We take it, however, that a city the size of Spokane cannot well dispense with street car service. The street car may well be called the poor man's carriage. If it is he needs a good, prompt and expeditious carriage. He must not be forced to take too many chances in getting to his work on time nor should he be compelled to spend too much of his time in going to and from his work, and we are sure that he should not be burdened with providing free rides for the policemen and other city employees, or the paving of a goodly portion of the streets over which he rides, for that burden, in the main, should fall upon the adjoining property owner. The extra cost of laying pavement occasioned by the street car tracks, and any special damage done by the operation of street cars, should probably be paid by those who patronize the street railway. If the car rider in fact pays for too much of the paving and the other charges mentioned, then the elimination of these charges should be done for his benefit.

We have been asked by respondent to grant it a seven-cent fare, a transfer charge of one cent, and an increased charge for school tickets. We have not seen our way clear to grant all these concessions. We have, however, thought and so stated at the hearing, that we believed for the general

passenger a six-cent fare should be allowed. We will watch the results of this increase and are hopeful that while it is being tried out the people of Spokane and the traction officials will so harmonize their differences that traction difficulties in that city will be reduced to a minimum.

Under the law of this state as it now exists there is no longer any force to the expression that the traction companies have made contracts with the municipalities which they should be forced to live up to. If one street car system in Spokane is essential and a judicious enterprise, then in the very nature of things it must be supported through rates, and it is self-evident that if a street car system is necessary in Spokane, the value of the service to those who ride must be the reasonable cost of the service.

At our late hearing on the 2nd day of April, 1919, we announced that we would, for the period of ninety days, allow a six-cent rate on general passengers; school tickets and other rates to remain as in the past; outstanding tickets to be used by the payment of an additional fare of one cent.

Order.

Wherefore, It Is Ordered, That for the period of ninety days from and after the 2nd day of April, 1919, the Washington Water Power Company be allowed to collect from adults and children (other than school children) above the age of five years, six cents for one continuous passage over its lines, and that outstanding tickets may be used by the payment of an additional fare of one cent.

Witness, The Public Service Commission of Washington, at Olympia, Washington, this 9th day of April, 1919.

By its orders of June 30, 1919, and September 1, 1919, the Commission continued the force of the foregoing order, and subsequently entered the following:

The respondent Washington Water Power Company has filed with the Commission its application for an order in the above entitled proceeding continuing in effect the six-cent street car fare order of April, 1919. The city of Spokane has consented to a granting of this application for a period of ninety days.

It appearing to the Commission that the purpose in limiting the duration of that order in each instance to periods of sixty or ninety days was with a view to keeping in touch with the proposed consolidation of the two street car systems in the city of Spokane that a further order could be made fixing a rate such as a consolidated system would warrant;

And it appearing that the street car system of the Spokane and Inland Empire Railroad Company was sold at public sale on November 1, 1919, and that that sale has not as yet been confirmed by the court;

It further appearing that negotiations are now in progress between the purchasers of said system and the Washington Water Power Company looking to a consolidation of the two street car systems and a final solution of the street car fare problem;

And the Commission being of the opinion that it should keep in touch with the proposed consolidation and should retain jurisdiction of the proceeding so that a permanent order can be made at such time as the situation warrants, makes the following Order:

It Is Ordered, That the order made and entered in the above entitled proceeding on April 9, 1919, fixing a six-cent fare in the city of Spokane be, and the same is, hereby continued in force and effect until the further order of the Commission.

And It Is Further Ordered, That this proceeding may be opened for further hearing or consideration upon proper application by either or both complainant and respondent.

Witness, The Public Service Commission of Washington, this 1st day of December, 1919.

No. 4797.

The City of Spokane, a Municipal Corporation, Complainant, v. The Spokane and Inland Empire Railroad Company and F. E. Connors, Receiver, Respondents.

Respondents sought to increase fares applying on the street railway system within the city of Spokane. The findings and order were as follows:

I.

The respondent, the Spokane and Inland Empire Railroad Company, owns and operates in, and in the vicinity of, Spokane, Washington, an urban and interurban car system. It also owns and operates an hydro-electric power plant near Spokane called the Nine Mile power plant, together with transmission lines from said power plant to its urban and interurban lines. The Commission has never determined a distinct rate base for the urban property of the respondent company. The value of the property of the urban system has been determined and with additions thereto, taken from the books of the company, we estimate the cost of the urban property at \$2,252,603.47. Included in the last mentioned sum is an apportionment of the Nine Mile power plant and transmission lines, recreation grounds operated in conjunction with the urban lines and certain costs of bridges.

II.

The gross earnings, expenses and losses of the respondent's urban system by years are as follows:

	1917	1918
Earnings	\$454,776 07	\$422,669 48
Expenses	509,409 21	523,416 73
Loss.....	\$54,633 14	\$100,747 25

III.

The respondent, on its city lines, in 1917 and 1918 carried passengers as follows:

	1917 Number of Passengers	1918 Number of Passengers
5-Cent fare	9,008,329	8,264,695
School tickets	290,768	185,743
Free transfers	1,193,573	991,465
Free passes and badges.....	623,557	506,935
Total passengers.....	11,116,227	9,948,834

IV.

February 21, 1919, respondent made application to the Public Service Commission of Washington for an increase in fares to become effective March 25, 1919, under which it sought to raise its fares for adults and children (other than school children) over five years of age, from five (5) to seven (7) cents; transfers from nothing to one (1) cent; and students, from twenty-two (22) rides for one dollar (\$1.00) to forty (40) rides for two dollars and forty cents (\$2.40).

V.

The wages paid the employees of the respondent company on its urban lines were the subject of investigation by the Federal War Board and they were deemed low by said board and increases were to be made. The Federal Board appealed to the Public Service Commission to grant increase of fares to the respondent company. The respondent company is now being operated by a receiver and said company is insolvent. At the hearing the Commission announced in open session that it would permit an increase of rates to six (6) cents for the period of ninety (90) days, the school tickets and other rates to remain as in the past, outstanding tickets to be used by the payment of the additional fare of one (1) cent.

Order.

Therefore, It Is Ordered, That the respondent company shall for the period of ninety (90) days, or until further order of this Commission, collect the following rate of fares, to-wit: On its urban lines, six (6) cents for one continuous passage in one direction for all passengers including children (not school children) over five years of age; other fares to remain as heretofore, and outstanding tickets may be used by the payment of the additional fare of one (1) cent.

Witness, The Public Service Commission of Washington, this 9th day of April, 1919.

As will appear from an examination of the findings and order in each, this case and No. 4796 preceding are closely related. The Commission still retains jurisdiction in this cause, and on December 1, 1919, entered an order herein, the provisions of which were identical with a similar order entered in cause No. 4796 on the same date.

ORDERS AFFECTING ELECTRIC LIGHT AND POWER COMPANIES.

No. 1809.

The Public Service Commission of Washington, et al., Complainants, v. The Washington Water Power Company, Respondent.

This proceeding in its inception was brought jointly with the public utilities commission of Idaho, to determine the fair value of the company's light and power system in Washington and Idaho, used and useful as of date December 31, 1917. The Commission found such value to be \$20,500,000, and fixed the sum of \$16,700,000 as the rate base applicable to the portion of the property within the State of Washington (Cf. Report of the Commission for 1918, p. 93 et seq., and the findings and order as of June 1, 1918, therein). Subsequently the Commission undertook the apportionment of this value of \$16,700,000 to the component parts of the company's physical property, and upon this based a rate investigation, all of which culminated in the entry December 18, 1918, of findings and order as follows:

The matter of the proposed rates of the Washington Water Power Company filed with the Commission under date of November 18, 1918, to become effective December 18, 1918, for the communities in the so-called Big Bend and Palouse districts of the State of Washington, coming on for hearing pursuant to notice, at Ritzville, Washington, on the 2nd day of December, 1918, for Ritzville and Lind, before Chairman E. F. Blaine and Commissioners A. A. Lewis and Frank R. Spinning; D. F. McCurrach, chief engineer, and E. J. Delbridge, official reporter for the Commission, being present; the town of Ritzville being represented by C. W. Rathbun, its attorney, and by A. L. Wiffin, its mayor, O. H. Green, T. Thiel, M. A. Carter and O. R. Clark, members of its council, and also by C. A. Sprague, representing the Ritzville "Citizen," Mr. Lansing, representing the Commercial Club, and W. K. Kreiger, representing the Milling Company and also the Commercial Club, and Dr. Johnson; the Washington Water Power Company being represented by Frank T. Post, its attorney, by J. S. Simpson, its auditor, and by M. C. Osborn, its commercial agent; the town of Lind not being represented.

And said matter coming on further for hearing at Sprague, Washington, on the 3rd day of December, 1918, for the towns of Sprague, Harrington and Odessa, pursuant to notice, the Commission being represented as above; the town of Sprague being represented by John I. Melville, its attorney, by Matt Brislawn, its mayor, and by Victor Hertrich and August Witt, councilmen; the town of Odessa being represented by W. M. Nevins, attorney; the town of Harrington not being represented; the Washington Water Power Company being represented as above.

And said matter coming on further for hearing at Davenport, Washington, on the fourth day of December, 1918, pursuant to notice, for the towns of Davenport, Reardan, Almira, Creston, Hartline, Wilbur and Govan; the

Commission being present as above; the town of Davenport being represented by Mr. Campbell, C. W. Jarvis and C. E. Ivey members of its council, and by Jim Godwin of the Davenport "Times-Tribune." The town of Reardan was represented by J. W. Mann, John Lawrence and John Raymond members of its council; Almira was represented by N. K. Manson, its mayor; Wilbur was represented by A. Alexander, its mayor; Creston was represented by Chas. Funkhauser, its mayor; Hartline was represented by H. L. Rogers, one of its councilmen, and also by S. Higgins, manager of the Farmers Union Grain Company. Govan was not represented. The Washington Water Power Company being represented as above.

And said matter coming on further for hearing at Tekoa, Washington, on the 5th day of December, 1918, pursuant to notice, for the towns of Tekoa, Rockford, Latah, Oakesdale, Belmont, Farmington and Spangle; the Commission being represented as above; Tekoa being represented by J. P. Burson, its attorney, by S. A. Phipps, its mayor, and by C. O. Worley, a member of its council; Rockford, Latah, Oakesdale, Belmont, Farmington and Spangle not being represented; the Washington Water Power Company being represented as above.

And said matter coming on further for hearing at Colfax, Washington, on the 6th day of December, 1918, pursuant to notice, for the towns of Colfax, Sunset, St. John, Endicott, Diamond, Garfield and Elberton; the Commission being represented as above; Colfax being represented by O. H. Horton, its attorney, by P. Codd, its mayor, by M. J. Maloney and Dr. J. F. Tift, members of a committee of the Commercial Club, by R. P. Hill, one of its councilmen, and by Robert Butcher. St. John was represented by Chas. M. Vorhees of Colfax, as its attorney; Garfield was represented by C. H. Bentley, its mayor, and by E. O. Humphreys; Elberton was represented by Guy Irwin. Sunset, Endicott and Diamond were not represented. The Washington Water Power Company was represented as above.

And said matter coming on further for hearing at Pullman, Washington, for Pullman, Palouse, Uniontown and Colton, on the 7th day of December, 1918, pursuant to notice, the Commission being represented as above; Pullman being represented by D. C. Dow, its attorney, by Prof. George H. Watt, representing the Chamber of Commerce of Pullman, by J. P. Duffy, of its city council, and by Prof. H. V. Carpenter and Prof. B. L. Steele; Palouse being represented by George A. Weldon, its attorney, and J. J. Johnson, its city clerk; Uniontown and Colton being represented by M. S. Jamar, their attorney; the Washington Water Power Company being represented as above; and the Commission having received testimony of witnesses and documentary evidence and being fully advised in the premises, finds as follows:

I.

That the Washington Water Power Company is engaged in the State of Washington in furnishing electrical energy for hire.

II.

That heretofore, to-wit, on the 1st day of June, 1918, the Public Service Commission of the State of Washington made a valuation of the property of the Washington Water Power Company used and useful in the State of

Washington for the generation, transmission and sale of electrical energy, and fixed as a rate base the sum of \$16,700,000.00.

III.

That subsequent to the fixing of said rate base said Commission directed its chief engineer, D. F. McCurrach, to submit to the Commission an apportionment of said rate base to the different communities in the State of Washington served by the Washington Water Power Company. That from the study so made it appears that, based upon the individual maximum demand at the substations serving the various localities, the property of said company apportioned to each community is as follows:

PALOUSE DISTRICT.

Rockford	.....	\$34,017 00
Spangle	.....	44,820 00
Tekoa	.....	93,028 00
Latah	.....	25,339 00
Belmont	.....	} 138,465 00
Oakesdale	.....
Farmington	.....
Garfield	.....
Elberton	.....
Palouse	.....	86,217 00
Celfax	.....	223,028 00
Sunset	.....	} 126,699 00
St. John	.....
Diamond	.....
Endicott	.....
Pullman	.....	234,868 00
Uniontown	.....	} 108,228 00
Colton	.....
Johnson	.....
Total Palouse District.....		\$1,114,709 00

BIG BEND DISTRICT.

Almira	} \$74,203 00
Hartline	
Creston	92,328 00
Davenport	176,951 00
Harrington	161,615 00
Govan	} 136,477 00
Wilbur	
Lind	121,957 00
Odessa	114,700 00
Reardan	134,596 00
Ritzville	207,083 00
Sprague	137,912 00
Pacific Power & Light Co.....	113,637 00
<hr/>	
Total Big Bend District.....	\$1,471,459 00

IV.

That the rates of income earned the Washington Water Power Company by the various communities mentioned in the foregoing paragraph of these

findings, based upon the apportionment therein stated, for the year ending December 31, 1917, is as follows:

PALOUSE DISTRICT.

Rockford	1.29 per cent.
Spangle	2.69 per cent.
Tekoa	7.42 per cent.
Latah	2.84 per cent.
Belmont	4.36 per cent.
Oakesdale	
Farmington	
Garfield	
Elberton	
Palouse	1.39 per cent.
Colfax	7.27 per cent.
Sunset	3.71 per cent.
St. John	
Diamond	
Endicott	6.90 per cent.
Pullman	
Uniontown	0.43 per cent.
Colton	
Johnson	

BIG BEND DISTRICT.

Almira	8.13 per cent.
Hartline	
Creston	5.26 per cent.
Davenport	5.54 per cent.
Harrington	4.01 per cent.
Govan	5.54 per cent.
Wilbur	
Lind	4.84 per cent.
Odessa	5.21 per cent.
Reardan	2.53 per cent.
Ritzville	7.66 per cent.
Sprague	4.38 per cent.
Pacific Power & Light Co.....	3.05 per cent.*

V.

That the apportionment of property upon a demand basis does not actually reflect the financial benefit to the utility of the business furnished by any particular locality, owing to the fact that the amount of power furnished for light is not in proportion to the energy furnished for power, the light rate and the power rate being different, the power rate being lower than the light rate, the greater the consumption of power in a community the lower the rate of return. At the various hearings above mentioned, at some of which, particularly at the city of Pullman, where the state college was represented by several of its professors, no better plan of apportionment was suggested; thus we deem the same to be as good a method as can be adopted, the Commission still being permitted, under its statutory powers, to be influenced by other elements in its survey of the general situation, under what is denominated as the Commission's elasticity of judgment.

VI.

The proposed schedule of rates of the Washington Water Power Company, filed as above, applying to the following communities: Ritzville, Lind, Sprague, Harrington, Odessa, Davenport, Reardan, Almira, Creston, Hartline,

Wilbur, Govan, Tekoa, Rockford, Latah, Oakesdale, Belmont, Farmington, Spangle, Sunset, St. John, Endicott, Diamond, Garfield, Elberton, Palouse, Uniontown and Colton, are as follows:

SCHEDULE 15—RESIDENTIAL LIGHTING AND COOKING RATE.

Classification:

This rate applies to churches, public schools, public libraries, private residences, including private garages, but does not apply to boarding and rooming houses, apartment houses, sororities, fraternities or public and private hospitals.

Rate:

For the first 20 k. w. h. per month, 15c per kilowatt hour.

For all over 20 k. w. h. per month, 3c per kilowatt hour.

Plus a service charge of \$1.00 per month, per horsepower of connected load, in motors of 1 horsepower or over.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The demand shall be determined by the name plate rating of all motors connected of 1 horsepower or over.

The demand for private bulk grain elevators shall be 50% of the connected load of the motors used for such purpose.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service see Sheet No. 13.

SCHEDULE 16—COMMERCIAL LIGHTING AND POWER RATE.

Classification:

This rate applies to all commercial accounts mercantile establishments, offices, public buildings, motion picture shows, hospitals, lodges, boarding and rooming houses and apartment houses where the individual apartments are measured by a master meter and treated as one account; sororities and fraternities where service is used for lighting, heating and power; all heating devices, and motors of less than 5 horsepower, shall take this rate except for refrigeration.

Rate:

For the first 72 hours use of connected load, 15c per k. w. h.

For all over 72 hours use of connected load, 7c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The connected load shall include the total connected wattage of lamps; empty sockets to be taken as 25 watts each. Heating devices and motors not to be taken as part of the connected load, except where connected load is measured by maximum demand meters (at the option of the power company) in which case the maximum demand as measured by the meters shall be taken. The demand used for computing the rates shall be figured to the nearest 100 watts only; any demand less than 200 watts shall be considered as having a capacity of 200 watts.

The determination of demand of hotels, lodging and rooming houses, hospitals, sororities and fraternities shall be the total connected load less 40% of the connected load for those rooms used as bedrooms.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service see Sheet No. 13.

VII.

The proposed schedule of rates of the Washington Water Power Company, filed as above, applying to the following communities, Pullman and Colfax, are as follows:

SCHEDULE 17—RESIDENTIAL LIGHTING AND COOKING RATE.

Classification:

This rate applies to churches, public schools, public libraries, private residences, including private garages, but does not apply to boarding and rooming houses, apartment houses, sororities, fraternities or public and private hospitals.

Rate:

For the first 20 k. w. h. per month, 13c per kilowatt hour.

For all over 20 k. w. h. per month, 3c per kilowatt hour.

Plus a service charge of \$1.00 per month, per horsepower of connected load, in motors of 1 horsepower or over.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The demand will be determined by the name plate rating of all motors connected of 1 horsepower or over.

The demand for private bulk grain elevators shall be 50% of the connected load of the motors used for such purpose.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service see Sheet No. 13.

SCHEDULE 18—COMMERCIAL LIGHTING AND POWER RATE.

Classification:

This rate applies to all commercial accounts mercantile establishments, offices, public buildings, motion picture shows, hospitals, lodges, boarding and rooming houses and apartment houses where the individual apartments are measured by a master meter and treated as one account; sororities and fraternities where service is used for lighting, heating and power; all heating devices and motors of less than 5 horsepower, shall take this rate except for refrigeration.

Rate:

For the first 72 hours of connected load, 13c per k. w. h.

For all over 72 hours of connected load, 7c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The connected load shall include the total connected wattage of lamps; empty sockets to be taken as 25 watts each. Heating devices and motors not to be taken as part of the connected load, except where connected load is measured by maximum demand meters (at the option of the power company) in which case the maximum demand as measured by the meters shall be taken. The demand used for computing the rates shall be figured to the nearest 100 watts only; any demand less than 200 watts shall be considered as having a capacity of 200 watts.

The determination of demand of hotels, lodging and rooming houses, hospitals, sororities and fraternities shall be the total connected load less 40% of the connected load for those rooms used as bedrooms.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service see Sheet No. 13.

VIII.

That the proposed schedule of rates of the Washington Water Power Company, filed as above, and applying to the communities of Ritzville, Lind, Sprague, Harrington, Odessa, Davenport, Reardan, Almira, Creston, Hartline, Wilbur, Govan, Tekoa, Rockford, Latah, Oakesdale, Belmont, Farmington, Spangle, Colfax, Sunset, St. John, Endicott, Diamond, Garfield, Elberton, Pullman, Palouse, Uniontown and Colton, are as follows:

SCHEDULE 20—FLAT RATE LIGHTING.

Classification:

This rate applies to sign and outline lighting.

Rate:

7.2c per lamp month for each (5W-10V) Mazda Sign Lamp.

Rate is based on 180 hours' burn per month at 8c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$2.50 per month.

Lamp Service:

This rate includes free renewal of burned-out lamps, refilling of signs and patrol service for turning on and off.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service see Sheet No. 12.

SCHEDULE 23—GENERAL POWER RATE.

Classification:

This rate applies to all commercial power, municipal power, industrial heating, public garages and refrigeration used continuously throughout the year, where no lighting load is used on power circuit.

Rate:

First 20 hours' use (or less) per month of consumer's connected load, \$1.50 per k. v. a.

Next 20 hours' use (or less) per month of consumer's connected load, 5c per k. w. h.

Next 30 hours' use (or less) per month of consumer's connected load, 3c per k. w. h.

Next 30 hours' use (or less) per month of consumer's connected load, 2c per k. w. h.

Next 100 hours' use (or less) per month of consumer's connected load, 1c per k. w. h.

Over 200 hours' use per month of consumer's connected load, $\frac{1}{4}$ c per k. w. h.

Subject to quantity discount (based on monthly bill) as follows:

1st \$200.00net \$200 00

3rd \$100.00, 20% discount.....net 80 00

4th \$100.00, 30% discount.....net 70 00

All over \$500.00, 40% discount.

Determination of Demand:

On installations totaling 5 horsepower or less the connected load will be assumed to be the demand.

On installations exceeding 5 horsepower, the power company may, at its option, determine the maximum demand by suitable indicating or recording instruments. The power factor being assumed to be unity.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service, see Sheet No. 13.

SCHEDULE 24—FLOUR MILL POWER RATE.

Classification:

This rate applies to flour mills with a connected horsepower load of 25 horsepower or over. The supply being 3-phase, 60 cycle, alternating current at 2300, 6600, or 13,200 volts (at the company's option).

Rate:

\$5.00 per horsepower month of maximum demand (of 746 watts).

Minimum Charge:

The minimum charge under this schedule shall be \$45.00 per horsepower year of demand, or a minimum of nine months run.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For terms and conditions of service see Sheet No. 13.

SCHEDULE 25—BULK GRAIN ELEVATOR RATE.

Classification:

This rate applies to power service for bulk grain elevators only.

Rate:

A service charge of \$1.00 per month, per horsepower of maximum demand.
And in addition the following rate for all electrical energy consumed:
For the first 100 kilowatt hours, per month 10c per k. w. h.
For all excess kilowatt hours, per month 2c per k. w. h.

Minimum:

Yearly minimum service charge of \$12.00 per horsepower of maximum demand.

Determination of Demand:

The determination of demand shall be 75% of the name plate rating of all motors connected.

Term:

Minimum contract for term of one year.

Terms and Conditions of Service:

For other terms and conditions see Sheet No. 13.

SCHEDULE 26—MUNICIPAL STREET LIGHTING RATE.

(Incandescent.)

Classification:

This rate applies for municipal street lighting only, by means of standard series incandescent lamps.

Rate:

\$27.00 per lamp per year for each 100 candle power, standard street series incandescent lamps.
\$54.00 per lamp per year for each 250 candle power, standard street series incandescent lamps.

Lamp Service:

Burned out and broken lamps will be replaced under this schedule.

Term:

The minimum term of contract shall be ten years.

SCHEDULE 29—INDUSTRIAL FLAT RATE.

Classification:

This rate applies to water heating by means of circulation, plastic or clamp-on heaters, and for industrial heating appliances.

Rate:

For controlled service, \$3.35 per kilowatt month during period connected.
For continuous service, \$5.00 per kilowatt month during period connected.

Term:

The minimum term of contract shall be one year.

Terms and Conditions of Service:

For other terms and conditions see Sheet No. 13.

SCHEDULE 30—EMPLOYEES' RATE.

Classification:

This rate applies to all permanent employees of The Washington Water Power Company.

Rate:

First 55 kilowatt hours (or less) per month, \$1.00.
All over 55 kilowatt hours per month, 3c per kilowatt hour.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Term:

This rate shall apply only while consumer is in the employ of the company.

Terms and Conditions of Service:

This rate is applicable only for residential purposes, where the premises served (houses, rooms, apartments, etc.) are occupied exclusively by employees as heads of families. This rate is not applicable where boarders or roomers are taken and where the premises are used partly for business purposes.

For other terms and conditions see Sheet No. 12.

TERMS AND CONDITIONS.

For the purpose of determining the amount of electrical energy used, a meter or metetrs may be installed by the power company upon the consumer's premises at a point most convenient for the company's service.

It is agreed that the power company shall install any meter or meters which it may need for its own convenience, at its own expense, for the use of which no additional charge will be made to the consumer. For special or additional meters installed at the consumer's request, an additional charge will be made.

All meters, wires and appliances furnished by the power company shall remain the property of the power company. It is agreed that all wires upon the premises of the consumer to which the company's service shall be connected, shall be so installed that the company may carry out this agreement and shall be kept in proper and safe condition by the consumer, and the company will not be responsible for losses caused by defective wiring installed by the consumer. That the agents of the company shall have, and are hereby given, permission to enter the premises at all reasonable times, so long as this agreement remains in force or any of the company's property remains therein, for the purpose of keeping in repair, or removing its property or inspecting its own or consumers wires or apparatus; and the consumer shall not permit such access, for said purposes, to parties other than the employees or authorized representatives of the company, or persons duly authorized by law.

In case the supply of electrical energy shall be interrupted or fail, such interruption shall not constitute a breach of this agreement, nor shall the company be liable for damages by reason thereof. The company, moreover, may discontinue service at any time without notice, whenever the consumer has violated this agreement or any other agreement existing between th consumer and the company. Should the company waive any such violation on the part of the con-

sumer and resume its service, the consumer shall not be relieved of his obligations under this or any other agreement, but the same shall continue in full force. The company also reserves the right to shut off the supply of electrical energy for repair or want of supply.

When electrical energy is furnished by meter, should the meter fail to register the electrical energy, the consumption shall be averaged by another meter or by the amount charged for a corresponding month.

In case of defective light or service, written notice must be served within 24 hours at the office of the company.

Bills will be rendered monthly unless otherwise specified and are due and payable on presentation.

The consumer shall deposit, from time to time, such reasonable sums of money as may be required by the company as continuing security for the performance of the obligations of the consumer to the company.

The consumer shall be responsible for all damages to or loss of the company's property located on the consumer's premises and used in carrying out this agreement unless occasioned by the company's negligence.

IX.

We approve and modify the foregoing schedules of rates as follows:

Schedule Fifteen: Residential lighting and cooking rate, modified as follows: First, the town of Ritzville rate shall be fourteen cents (14c) for the first 20 kilowatt-hours per month. Second, the demand for private bulk grain elevators shall be 40 per cent of the connected load of the motors used for such purposes.

Schedule Seventeen: Residential lighting and cooking rate. Determination of demand, the demand for private bulk grain elevators shall be 40 per cent of the connected load of the motors used for such purposes.

Schedule Sixteen: Commercial lighting and power rate. The town of Ritzville rate shall be 14 cents for the first 72 hours' use of connected load.

Schedule Twenty: Flat rate lighting. Approved as filed.

Schedule Twenty-three: General power rate, is approved, with this exception: The municipal pumping plant at Pullman to continue under present rate until the drop in prices of equipment and labor shall justify the city of Pullman in installing a new pump and motor carrying a more distributive load.

Schedule Twenty-four: Flour mill rate, approved.

Schedule Twenty-five: Bulk grain elevator rate, is approved as to all future installations; the present installations to be controlled by the following tariff:

SCHEDULE D—POWER RATE FOR BULK GRAIN ELEVATORS.

(Metered Service.)

Rate:

First 20 kilowatt hours per month, 15c per kilowatt hour.
Next 20 kilowatt hours per month, 13c per kilowatt hour.
Next 20 kilowatt hours per month, 12c per kilowatt hour.
Over 60 kilowatt hours per month, 5c per kilowatt hour.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Schedule Twenty-six: Municipal street lighting rate; approved.

Schedule Twenty-nine: Flat rate water heating; approved.

Schedule Thirty: Employee's rate; approved.

The terms and conditions attached to the foregoing schedules not having been challenged, we refuse to pass judgment thereon.

Opinion.

We regret the necessity of limiting schedule twenty-five to future installations and would not do so were it not for the evidence adduced at one of the hearings which clearly shows that the Washington Water Power Company was cognizant of the fact that of late new installations of machinery were being made dependent upon the use of electrical energy at the schedules then in effect, and the proposed schedule if applied to these installations would increase the rate in the neighborhood of 300 per cent. We must insist that the Washington Water Power Company and those enjoying practically the old rates should so adjust their matters on some equitable basis that within a reasonable length of time all commercial bulk grain elevators shall be upon the same rate.

The municipal pumping plant at Pullman is a matter which has given us great concern. The rate now in force applicable to that installation is very low. Should it be changed to conform to the proposed schedule, the annual expense to the municipality would increase by some \$3,000.00. Should the city install a proper installation so that the load would be properly distributed, and pay the proposed schedule of rates, its increased expenditure for pumping would increase some \$1,200.00 per annum. The cost, however, to install a new motor and pump would be in the neighborhood of \$4,000.00. As many anticipate a drop in prices, we believe that we are justified in excepting this pumping plant from the general power schedule, number twenty-three. In case a proper adjustment of this matter cannot be brought about within a reasonable time, we will grant a further hearing concerning the same.

Order.

Wherefore, It Is Ordered, That the rates of the Washington Water Power Company in the Big Bend and Palouse districts of the State of Washington, shall be as follows:

For the communities comprising Lind, Sprague, Harrington, Odessa, Davenport, Reardan, Almira, Creston, Hartline, Wilbur, Govan, Tekoa, Rockford, Latah, Oakesdale, Belmont, Farmington, Spangle, Sunset, St. John, Endicott, Diamond, Garfield, Elberton, Palouse, Uniontown and Colton:

SCHEDULE 15—RESIDENTIAL LIGHTING AND COOKING RATE.

Classification:

This rate applies to churches, public schools, public libraries, private residences, including private garages, but does not apply to boarding and rooming houses, apartment houses, sororities, fraternities or public and private hospitals.

Rate:

For the first 20 k. w. h. per month, 15c per kilowatt hour.

For all over 20 k. w. h. per month, 3c per kilowatt hour.

Plus a service charge of \$1.00 per month, per horsepower of connected load, in motors of 1 horsepower or over.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The demand will be determined by the name plate rating of all motors connected of 1 horsepower or over.

The demand for private bulk grain elevators shall be 40% of the connected load of the motors used for such purpose.

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SCHEDULE 16—COMMERCIAL LIGHTING AND POWER RATE.

Classification:

This rate applies to all commercial accounts mercantile establishments, offices, public buildings, motion picture shows, hospitals, lodges, boarding and rooming houses and apartment houses where the individual apartments are measured by a master meter and treated as one account; sororities and fraternities where service is used for lighting, heating and power; all heating devices, and motors of less than 5 horsepower, shall take this rate except for refrigeration.

Rate:

For the first 72 hours' use of connected load, 15c per k. w. h.

For all over 72 hours' use of connected load, 7c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The connected load shall include the total connected wattage of lamps; empty sockets to be taken as 25 watts each. Heating devices and motors not to be taken as part of the connected load, except where connected load is measured by maximum demand meters (at the option of the power company) in which case the maximum demand as measured by the meters shall be taken. The demand used for computing the rates shall be figured to the nearest 100 watts only; any demand less than 200 watts shall be considered as having a capacity of 200 watts.

The determination of the demand of hotels, lodging and rooming houses, hospitals, sororities and fraternities shall be the total connected load less 40% of the connected load for those rooms used as bedrooms.

It Is Further Ordered, That the residential lighting and cooking rate in the town of Ritzville shall be as follows:

SCHEDULE 17—RESIDENTIAL LIGHTING AND COOKING RATE.

Classification:

This rate applies to churches, public schools, public libraries, private residences, including private garages, but does not apply to boarding and rooming houses, apartment houses, sororities, fraternities or public and private hospitals.

Rate:

For the first 20 k. w. h. per month, 14c per kilowatt hour.

For all over 20 k. w. h. per month, 3c per kilowatt hour.

Plus a service charge of \$1.00 per month, per horsepower of connected load, in motors of 1 horsepower or over.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The demand will be determined by the name plate rating of all motors connected of 1 horsepower or over.

The demand for private bulk grain elevators shall be 40% of the connected load of the motors used for such purpose.

It Is Further Ordered, That the commercial lighting and power rate in the town of Ritzville shall be as follows:

SCHEDULE 18—COMMERCIAL LIGHTING AND POWER RATE.

Classification:

This rate applies to all commercial accounts mercantile establishments, offices, public buildings, motion picture shows, hospitals, lodges, boarding and rooming houses and apartment houses where the individual apartments are measured by a master meter and treated as one account; sororities and fraternities where service is used for lighting, heating and power; all heating devices, and motors of less than 5 horsepower, shall take this rate except for refrigeration.

Rate:

For the first 72 hours' use of connected load, 14c per k. w. h.
For all over 72 hours' use of connected load, 7c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The connected load shall include the total connected wattage of lamps; empty sockets to be taken as 25 watts each. Heating devices and motors not to be taken as part of the connected load, except where connected load is measured by maximum demand meters (at the option of the power company) in which case the maximum demand as measured by the meters shall be taken. The demand used for computing the rates shall be figured to the nearest 100 watts only; any demand less than 200 watts shall be considered as having a capacity of 200 watts.

The determination of demand of hotels, lodging and rooming houses, hospitals, sororities and fraternities shall be the total connected load less 40% of the connected load for those rooms used as bedrooms.

It Is Further Ordered, That the residential lighting and cooking rate, and the commercial lighting and power rate, in the cities of Pullman and Colfax, shall be as follows:

SCHEDULE 19—RESIDENTIAL LIGHTING AND COOKING RATE.

Classification:

This rate applies to churches, public schools, public libraries, private residences, including private garages, but does not apply to boarding and rooming houses, apartment houses, sororities, fraternities or public and private hospitals.

Rate:

For the first 20 k. w. h. per month, 13c per kilowatt hour.
For all over 20 k. w. h. per month, 3c per kilowatt hour.
Plus a service charge of \$1.00 per month, per horsepower of connected load, in motors of 1 horsepower or over.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The demand will be determined by the name plate rating of all meters connected of 1 horsepower or over.
The demand for private bulk grain elevators shall be 40% of the connected load of the motors used for such purposes.

SCHEDULE 20—COMMERCIAL LIGHTING AND POWER RATE.

Classification:

This rate applies to all commercial accounts mercantile establishments, offices, public buildings, motion picture shows, hospitals, lodges, boarding and rooming houses and apartment houses where the individual apartments are measured by a master meter and treated as one account; sororities and fraternities where service is used for lighting, heating and power; all heating devices, and motors of less than 5 horsepower, shall take this rate except for refrigeration.

Rate:

For the first 72 hours' use of connected load, 13c per k. w. h.
For all over 72 hours' use of connected load, 7c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Determination of Demand:

The connected load shall include the total connected wattage of lamps; empty sockets to be taken as 25 watts each. Heating devices and motors not to be taken as part of the connected load, except where connected load is measured by maximum demand meters (at the option of the power company) in which case the maximum demand as measured by the meters shall be taken. The demand used for computing the rates shall be figured to the nearest 100 watts only; any demand less than 200 watts shall be considered as having a capacity of 200 watts. The determination of demand of hotels, lodging and rooming houses, hospitals, sororities and fraternities shall be the total connected load less 40% of the connected load for those rooms used as bedrooms.

It Is Further Ordered, That the flat rate sign and outline lighting, the flour mill rate, the municipal street lighting rate, the water heating rate and the employee's rate, in all of the above named communities, to-wit, Ritzville, Lind, Sprague, Harrington, Odessa, Davenport, Reardan, Almira, Creston, Hartline, Wilbur, Govan, Tekoa, Rockford, Latah, Oakesdale, Belmont, Farmington, Spangle, Colfax, Sunset, St. John, Endicott, Diamond, Garfield, Elberton, Pullman, Palouse, Uniontown and Colton, shall be as follows:

SCHEDULE 21—FLAT RATE LIGHTING.

Classification:

This rate applies to sign and outline lighting.

Rate:

7.2c per lamp month for each (5W-10V) Mazda sign lamp.

Rate is based on 180 hours' burn per month at 8c per k. w. h.

Minimum Charge:

The minimum charge under this schedule shall be \$2.50 per month.

Lamp Service:

This rate includes free renewals of burned out lamps, refilling of signs and patrol service for turning on and off.

SCHEDULE 22—FLOUR MILL RATE.

Classification:

This rate applies to flour mills with a connected horsepower load of .25 horsepower or over. The supply being 3-phase, 60 cycle, alternating current at 2300, 6600 or 13,200 volts (at the company's option).

Rate:

\$5.00 per horsepower month of maximum demand (of 746 watts).

Minimum Charge:

The minimum charge under this schedule shall be \$45.00 per horsepower year of demand, or a minimum of nine months' run.

SCHEDULE 23—MUNICIPAL STREET LIGHTING RATE.

Classification:

This rate applies for municipal street lighting only, by means of standard series incandescent lamps.

Rate:

\$27.00 per lamp per year for each 100 candle power, standard street series incandescent lamps.

\$54.00 per lamp per year for each 250 candle power, standard street series incandescent lamps.

Lamp Service:

Burned out and broken lamps will be replaced under this schedule.

SCHEDULE 24—INDUSTRIAL FLAT RATE.

Classification:

This rate applies to water heating by means of circulation, plastic or clamp-on heaters, and for industrial heating appliances.

Rate:

For controlled service, \$3.35 per kilowatt month during period connected.
For continuous service, \$5.00 per kilowatt month during period connected.

SCHEDULE 25—EMPLOYEE'S RATE.

Classification:

This rate applies to all permanent employes of the Washington Water Power Company.

Rate:

First 55 kilowatt hours (or less) per month, \$1.00.
All over 55 kilowatt hours per month, 3c per kilowatt hour.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

Term:

This rate applies only while consumer is in the employ of the company.

Terms and Conditions of Service:

This rate is applicable only for residential purposes, where the premises served (houses, rooms, apartments, etc.) are occupied exclusively by employes as heads of families.

This rate is not applicable where boarders or roomers are taken and where the premises are used partly for business purposes.

It Is Further Ordered, That the following general power rate shall apply to all general power services in the communities heretofore named, except the municipal pumping installation in the city of Pullman:

SCHEDULE 26—GENERAL POWER RATE.

Classification:

This rate applies to all commercial power, municipal power, industrial heating, public garages and refrigeration used continuously throughout the year, where no lighting load is used on the power circuit.

Rate:

First 20 hours' use (or less) per month of consumer's connected load, \$1.50 per k. v. a.
Next 20 hours' use (or less) per month, of consumer's connected load, 5c per k. w. h.
Next 30 hours' use (or less) per month of consumer's connected load, 3c per k. w. h.
Next 30 hours' use (or less) per month of consumer's connected load 2c per k. w. h.
Next 100 hours' use (or less) per month of consumer's connected load, 1c per k. w. h.
Over 200 hours' use, per month of consumer's connected load, $\frac{3}{4}$ c per k. w. h.
Subject to quantity discount (based on monthly bill) as follows:
1st \$200.00net \$200 00
3rd \$100.00, 20% discount.....net 80 00
4th \$100.00, 30% discount.....net 70 00
All over \$500.00, 40% discount.

Determination of Demand:

On installations totaling 5 horsepower or less the connected load will be assumed to be the demand.

On installations exceeding 5 horsepower, the power company may, at its option, determine the maximum demand by suitable indicating or recording instruments. The power factor being assumed to be unity.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

It Is Further Ordered, That the municipal pumping rate for the city of Pullman shall be as follows:

SCHEDULE 27—MUNICIPAL PUMPING RATE.

(Metered Service.)

Classification:

This rate applies to the city of Pullman only.

Rate:

1c per kilowatt hour for all electrical energy consumed during off-peak hours.

2c per kilowatt hour for all electrical energy consumed during peak hours.

Minimum Charge:

None.

It Is Further Ordered, That the bulk grain elevator rate (for future installations only) shall be as follows:

SCHEDULE 28—BULK GRAIN ELEVATOR RATE.

(For future installations only.)

Classification:

This rate applies to power service for bulk grain elevators only.

Rate:

A service charge of \$1.00 per month, per horsepower of maximum demand. And in addition the following rate for all electrical energy consumed.

For the first 100 kilowatt hours, per month, 10c per kilowatt hour.

For all excess kilowatt hours per month, 2c per kilowatt hour.

Minimum:

Yearly minimum service charge of \$12.00 per horsepower of maximum demand.

Determination of Demand:

The determination of demand shall be 75% of the name plate rating of all motors connected.

It Is Further Ordered, That all existing installations shall be controlled by the following bulk grain elevator rate:

SCHEDULE 29—POWER RATE FOR BULK GRAIN ELEVATORS.

(Metered Service.)

Classification:

This rate applies to power service for bulk grain elevators only.

Rate:

First 20 kilowatt hours per month, 15c per kilowatt hour.

Next 20 kilowatt hours per month, 13c per kilowatt hour.

Next 20 kilowatt hours per month, 12c per kilowatt hour.

Over 60 kilowatt hours per month, 5c per kilowatt hour.

Minimum Charge:

The minimum charge under this schedule shall be \$1.00 per month.

It Is Further Ordered, That the Washington Water Power Company shall cause to be eliminated all contracts carrying rates in conflict with those set forth in this order.

Witness, The Public Service Commission of Washington, this 18th day of December, 1918.

No. 4751.

The Public Service Commission of Washington, and the Town of Elma, a Municipal Corporation, Complainants, v. The Northwest Electric and Water Works, a Corporation, Respondent.

November 27, 1918, respondent filed with the Commission a proposed increase of its light and power rates. An order suspending the proposed rates pending investigation of their reasonableness was entered December 20, 1918. The utility subsequently withdrew the tariff complained of, and the proceeding was dismissed January 31, 1919.

No. 4777.

The Public Service Commission of Washington, ex rel. Franklin County Irrigation District No. 1, Complainants, v. Pacific Power and Light Company, Respondent.

Proceeding to determine the reasonableness of a proposed increase in irrigation rates. The disposition of the cause is set forth in the findings and order as follows:

I.

The respondent, Pacific Power & Light Company, is a corporation qualified to do business in the State of Washington, and is engaged in the furnishing of electrical energy for hire in Yakima, Benton and other counties in the State of Washington.

II.

Issued January 11, 1919, to become effective February 20, 1919, the Pacific Power & Light Company issued its supplement No. 3 to W. P. S. C. No. 42, cancelling supplement No. 1 to W. P. S. C. No. 42, which supplement No. 3 was filed with the Public Service Commission of the State of Washington, January 20, 1919, and is as follows:

Supplement No. 3 to W. P. S. C. No. 42.

Cancelling Supplement No. 1 to W. P. S. C. No. 42.

PACIFIC POWER & LIGHT COMPANY

Supplement No. 3 to Tariff No. 54.

**CANCELLING SUPPLEMENT No. 1 TO TARIFF No. 54 NAMING RATES
FOR ELECTRIC SERVICE IN THE STATE OF WASHINGTON.**

Issued January 11, 1919.

Effective February 20, 1919.

Approved:

Issued by

Guy W. Talbot, President,
Pacific Power & Light Company,
Portland, Oregon.

Lewis A. McArthur, Gen. Mgr.,
Pacific Power & Light Co.,
Portland, Oregon.

Issue of January 11, 1919.

Standard Schedule G.

PACIFIC POWER & LIGHT COMPANY

SCHEDULE G—IRRIGATION POWER—METER RATE.

Available on entire system (except as noted below) on contracts specifying equipment and years to be operated:

Class 1—For Installation With Rated Capacity of 25 Horsepower and Less.

A fixed charge of \$12.00 per irrigation season per rated horsepower of customers' connected apparatus, to be paid in equal monthly installments, pro-rated over the months of customers' irrigation season; plus the following meter rates for energy used during each month:

First 45 k. w. h. per rated h. p. of connected apparatus, 4c per k. w. h.

Next 75 k. w. h. per rated h. p. of connected apparatus, 1½c per k. w. h.

Next 165 k. w. h. per rated h. p. of connected apparatus, 1c per k. w. h.

All over 285 k. w. h. per rated h. p. of connected apparatus, ½c per k. w. h.

Customers may use motors of less than one horsepower on this schedule but minimum monthly charge will be \$1.00. All bills payable within 10 days from date of billing without discount.

Customers who have maintained their credit standing by prompt payment of bills may, at their option, pay the fixed charges of \$12.00 per horsepower in twelve monthly installments instead of during the irrigation season.

Class 2—For Installations With Rated Capacity of Over 25 Horsepower.

A fixed charge of \$12.00 per irrigation season per horsepower of customer's maximum demand to be paid in equal installments pro-rated over the months of customer's irrigation season; plus the following meter rates for energy used during each month:

First 45 k. w. h. per h. p. of maximum demand, 4c per k. w. h.

Next 75 k. w. h. per h. p. of maximum demand, 1½c per k. w. h.

Next 165 k. w. h. per h. p. of maximum demand, 1c per k. w. h.

All over 285 k. w. h. per h. p. of maximum demand, ½c per k. w. h.

Subject to the following quantity discounts if paid within 10 days from date of billing:

15% upon that portion of the kilowatt hour charges in excess of \$100 and not over \$200.00.

25% upon that portion of the kilowatt hour charge in excess of \$200 and not over \$400.00.

35% upon that portion of the kilowatt hour charge in excess of \$400.

Customers who have maintained their credit standing by prompt payment of bills may, at their option, pay the fixed charge of \$12.00 per horsepower in twelve monthly installments instead of during the irrigation season.

Fixed charge of \$12.00 per horsepower to be based on highest demand for season; monthly kilowatt hour charges to be based on the highest demand during month; but both fixed and kilowatt hour charges to be computed upon a maximum demand equal to at least 75% of the rated connected load, and not less than 25 horsepower.

Where customer has more than one motor installed and operates only part of his equipment during a portion of the irrigation season, the running charges during such period will be computed upon a maximum demand equal to at least 75% of the combined rated capacity of only the motor or motors operated during such period, but not less than 25 horsepower. Customer must notify company in advance of intention not to operate any part of connected equipment to obtain advantage of this provision.

Available on entire system (except Clatsop county, Oregon.)

III.

Issued February 8, 1919, to become effective March 12, 1919, the Pacific Power & Light Company issued its supplement No. 4 to W. P. S. C. No. 42, which supplement No. 4 was filed with the Public Service Commission of the State of Washington, February 14, 1919, and is as follows:

Supplement No. 4 to W. P. S. C. No. 42.

PACIFIC POWER & LIGHT COMPANY

Supplement No. 4 to Tariff No. 54.

**NAMING RATES FOR ELECTRIC SERVICE IN THE STATE OF
WASHINGTON.**

Issued February 8, 1919.

Effective March 12, 1919.

Approved:

Issued by

Guy W. Talbot, President,
Pacific Power & Light Company,
Portland, Oregon.

Lewis A. McArthur, Gen. Mgr.,
Pacific Power & Light Co.,
Portland, Oregon.

Issue of January 11, 1919.

Standard Schedule H.

PACIFIC POWER & LIGHT COMPANY

SCHEDULE H—IRRIGATION POWER—FLAT RATE.

Available on entire system (except as noted below) on contracts specifying equipment and years to be operated.

A fixed charge of \$12.00 per irrigation season per horsepower of customer's maximum demand to be paid in equal installments pro-rated over the months of customer's irrigation season; plus a running charge for a minimum of three consecutive months per year, as follows:

First 25 horsepower, \$5.50 per horsepower per month.

Next 25 horsepower, \$4.40 per horsepower per month.

Next 50 horsepower, \$3.80 per horsepower per month.

All over 100 horsepower, \$3.30 per horsepower per month.

Fixed charge to be based on the highest demand for season. Monthly running charge to be based on highest demand during month.

Where connected apparatus has rated capacity of 25 horsepower or less, customer will pay above rates and charges for a maximum demand equal to rated capacity of apparatus. If rated capacity is in excess of 25 horsepower, customer will pay for a maximum demand equal to at least 75 per cent of the rated capacity, but not less than 25 horsepower. Running charges continue during period the customer's apparatus is connected to company's line, or until the company receives notice to disconnect.

Where customer has more than one motor installed and operates only part of his equipment during a portion of the irrigation season, the running charges during such period will be computed upon a maximum demand equal to at least 75% of the combined rated capacity of only the motors operated during such period, subject to above provision applicable to rated capacities of 25 horsepower or less. Customer must notify company in advance of intention not to operate any part of connected equipment in order to obtain advantage of this provision.

All bills payable within 10 days from date of billing without discount.

Available on entire system (except Clatsop county, Oregon.)

IV.

The rates carried in supplement No. 3, to W. P. S. C. Tariff No. 42, being challenged, the Public Service Commission did on the 4th day of February, 1919, by order suspend said supplement No. 3, for the period of sixty (60) days from the effective date of said tariff, or to April 20, 1919.

V.

The Public Service Commission of Washington, heretofore, on to-wit, the 7th day of January, 1915, in cause No. 1683, did value the property of the respondent company and found the fair value of the property used and useful as a going concern on June 30, 1913, to be the sum of \$4,700,000.00. That an appeal was taken from such finding and order to the superior court of Yakima county, Washington. That by agreement of parties said valuation proceeding is held in abeyance that additional work may be done thereon and a completed valuation made. That since the 30th day of June, 1913, there has been net additions to the property of respondent company, so, for the purpose of this hearing only, we shall consider the value of the respond-

ent's property used and useful in the supplying of electrical energy in the State of Washington to be the sum of \$5,500,000.00.

VI.

That the Public Service Commission of Washington, through its accountant E. D. Ridley, caused an investigation of the books of the respondent company to be made, and concerning which Mr. Ridley testified on the hearing, with the following results, as shown by Tables I, II, III, IV, V, and VI:

VII.

Table I.—INCOME STATEMENT.

	1916	1917	1918
Commercial lighting, metered.....	\$345,340 81	\$392,538 03	\$415,173 60
Commercial lighting, flat rate.....	54,586 02	49,410 64	49,579 77
Commercial power, metered.....	221,719 11	185,609 87	221,026 15
Commercial power, flat rate.....	22,504 89	21,659 70	22,215 68
Irrigation power	60,000 00	152,102 17	161,782 52
Municipal street lighting, arc.....	31,481 76	29,707 25	28,665 59
Municipal street lighting, incandescent..	19,800 58	21,212 95	22,116 02
Private street lighting.....			793 29
Sales to other public service corporations			
Miscellaneous		12 94	1,401 12
Gross operating revenue.....	\$755,433 17	\$852,253 55	\$922,753 74
Rebates and discounts.....	57,843 20	73,481 55	70,440 14
Total operating revenue.....	\$697,589 97	\$778,772 00	\$852,313 60
Total non-operating revenue.....	10,953 27	20,371 29	21,769 47
Gross revenue	\$708,543 24	\$799,143 29	\$874,083 07
Total operating expenses.....	\$275,299 10	\$254,985 72	\$312,891 70
Taxes	30,060 35	37,360 54	44,036 28
Depreciation at 2.50%.....	132,255 49	135,120 24	147,419 96
Total expenses	\$437,614 94	\$427,466 50	\$504,347 94
Net income	\$270,928 30	\$371,676 79	\$369,735 13
Less non-operating revenue.....	10,953 27	20,371 29	21,769 47
Total net earnings.....	\$259,975 03	\$351,305 50	\$347,965 66
Average plant value.....	\$5,290,219 55	\$5,404,809 46	\$5,896,798 58
Rate per cent. earned.....	4.91	6.50	5.90
Total net earnings.....			\$347,965 66
Less in come tax, 1918.....			17,200 00
Balance, net			\$330,765 66
Per cent. earned.....			5.62

VIII.

Table II.—STATEMENT OF OPERATION.

FOR THE YEAR 1918	Total K. W. H. Sold	Irrigation K. W. H. Sold	Irrigation Per Cent. of Total	Gross Earnings	Discounts and Allowances	Total Operating Revenue	Total Operating Expenses	Taxes	Total Expenses and Taxes	Net Revenue Available for Depreciation and Interest
Yakima.....	7,991,590	1,097,798	13.41	\$275,613.95	\$21,037.61	\$254,576.34	\$78,491.79	\$16,998.10	\$95,489.89	\$159,086.45
Tupenish.....	2,506,013	784,093	31.36	72,654.93	5,770.42	66,884.51	19,230.39	4,403.63	83,633.02	83,251.49
Sunnyside.....	1,071,147	296,554	28.66	50,624.07	3,599.23	47,024.75	19,753.52	3,129.58	21,983.10	26,139.65
Prosser.....	826,226	19,524	2.36	20,680.03	1,701.64	18,978.39	7,164.11	968.90	8,132.91	10,775.45
Pasco and Kennewick.....	10,246,455	7,776,420	75.90	197,561.92	15,349.25	181,732.19	70,667.73	6,663.51	83,851.24	98,410.91
Walla Walla.....	6,238,727	234,883	3.76	213,629.52	15,349.25	198,280.26	63,540.09	6,737.55	70,277.64	128,812.62
Dayton and Watsburg.....	747,206	425	.06	49,021.80	4,145.47	44,876.33	19,129.64	2,968.43	22,089.07	22,796.76
Pomeroy.....	352,880	1,698	.45	23,147.84	1,866.60	21,281.24	7,371.86	368.25	7,680.10	13,601.14
Goldendale.....	162,693	.....	.....	13,612.75	1,068.70	12,544.05	7,598.12	1,233.01	8,831.13	3,722.92
White Salmon.....	92,709	58	.01	6,357.43	541.35	5,816.08	4,900.46	616.51	5,516.97	239.11
Totals.....	29,727,668	10,222,951	34.42	\$922,753.74	\$70,440.14	\$852,313.60	\$312,891.70	\$44,036.28	\$356,927.98	\$495,385.62
FOR THE YEAR 1917										
Yakima.....	7,167,006	893,929	12.05	\$245,375.91	\$19,517.49	\$225,858.42	\$65,033.55	\$14,421.18	\$79,454.73	\$146,403.69
Tupenish.....	2,082,782	842,360	40.44	61,981.76	4,952.30	57,029.46	19,115.93	3,736.05	22,851.98	34,177.48
Sunnyside.....	1,044,340	198,965	19.05	46,708.26	3,947.87	42,760.39	15,147.07	2,652.60	17,799.67	24,960.72
Prosser.....	380,492	4,000	1.05	20,331.66	1,927.60	18,404.06	7,027.70	821.93	7,849.63	10,554.43
Pasco and Kennewick.....	10,296,896	8,197,419	79.84	190,719.58	19,059.53	161,660.05	55,410.68	5,678.80	61,089.48	100,570.57
Walla Walla.....	6,340,166	206,788	3.29	207,314.34	16,060.62	191,253.72	59,562.09	5,716.16	65,278.25	125,955.47
Dayton and Watsburg.....	808,899	386	.04	46,434.04	4,078.75	42,355.29	15,854.01	2,503.16	18,357.17	23,968.03
Pomeroy.....	386,042	1,029	.27	23,833.48	2,230.52	21,602.96	7,486.49	261.52	7,748.01	13,854.96
Goldendale.....	163,299	.....	.....	13,118.95	1,194.64	11,924.31	6,230.07	1,046.10	7,296.17	4,658.14
White Salmon.....	72,092	.....	.....	6,435.57	492.23	5,943.34	4,128.13	523.04	4,651.17	1,292.17
Totals.....	28,711,982	10,316,876	35.93	\$852,253.55	\$73,451.55	\$778,772.00	\$254,936.72	\$37,360.54	\$292,346.26	\$486,425.74

IX.

Table III.—Operating Revenue by Classes Showing Percentage Divided on Gross Earning Basis.

	1917	
	<i>Earnings</i>	<i>Per Cent.</i>
Commercial lighting, metered	\$392,538 03	46.05
Commercial lighting, flat rate	49,410 64	5.80
Commercial power, metered	185,609 87	21.78
Commercial power, flat rate	21,659 70	2.54
Municipal street lighting, arc	29,707 25	3.48
Municipal street lighting, incandescent	21,212 95	2.49
Private street lighting		
Sales to other public service corporations		
Miscellaneous revenue	12 94	.01
Irrigation power	152,102 17	17.85
Total gross operating revenue	\$852,253 55	100.00

	1918	
	<i>Earnings</i>	<i>Per Cent.</i>
Commercial lighting, metered	\$415,173 60	44.99
Commercial lighting, flat rate	49,579 77	5.37
Commercial power, metered	221,026 15	23.95
Commercial power, flat rate	22,215 68	2.41
Municipal strteet lighting, arc	28,665 59	3.11
Municipal street lighting, incandescent	22,116 02	2.40
Private street lighting	793 29	.09
Sales to other public service corporations		
Miscellaneous revenue	1,401 12	.15
Irrigation power	161,782 52	17.52
Total gross operating revenue	\$922,753 74	100.00

X.

Table IV.—Income Statement from Irrigation Using Gross Earnings As a Basis for Dividing Operating Expenses and Kilowatt Hours Sold As a Basis for Dividing Taxes, Depreciation and Property.

	1917	1918
Irrigation power revenue	\$152,102 17	\$161,782 52
Irrigation expenses on gross earnings basis	\$45,514 95	\$54,943 78
Taxes on k. w. h. basis	13,423 64	15,157 29
Depreciation at 2.5% on k. w. h. basis	48,548 70	50,741 96
Total expenses	\$107,487 29	\$120,847 03
Net earnings	\$44,614 88	\$40,935 49
Average plant used for irrigation on k. w. h. basis	\$1,941,947 87	\$2,029,678 22
Rate of return	2.30	2.02

XI.

Table V.—Income Statement from Irrigation, Using Kilowatt Hours Sold As a Basis of Subdividing Expenses, Taxes, Depreciation and Property.

	1917	1918
Irrigation power revenue.....	\$152,102 17	\$161,782 52
Irrigation expenses on k. w. h. basis.....	\$91,616 37	\$107,697 32
Taxes on k. w. h. basis.....	13,423 64	15,157 29
Depreciation at 2.5% on k. w. h. basis.....	48,548 70	50,741 96
Total expenses	\$153,588 71	\$173,596 57
Net earnings	* \$1,486 54	* \$11,814 05
Average plant used for irrigation on k. w. h. basis....	\$1,941,947 87	\$2,029,678 22
Rate of return, per cent.....	* 0.08	* 0.58

* Indicates red figures.

XII.

Table VI.—K. W. H. Consumption by Classes, Showing Percentage Divided on K. W. H. Sold.

	1917	
	<i>K. W. H.</i>	<i>Per Cent.</i>
Commercial lighting, metered.....	3,760,190	13.06
Commercial lighting, flat rate.....	773,110	2.69
Commercial power, metered.....	9,291,839	32.36
Commercial power, flat rate.....	2,221,653	7.74
Municipal street lighting, arc.....	835,251	3.08
Municipal street lighting, incandescent.....	584,380	2.03
Private street lighting.....	18,825	.07
Sales to other public service corporations.....	869,860	3.03
Irrigation power	10,316,876	35.94
Total k. w. h. sold.....	28,711,984	100.00

	1918	
	<i>K. W. H.</i>	<i>Per Cent.</i>
Commercial lighting, metered.....	3,897,656	13.12
Commercial lighting, flat rate.....	715,535	2.41
Commercial power, metered.....	10,435,453	35.10
Commercial power, flat rate.....	2,274,643	7.65
Municipal street lighting, arc.....	802,495	2.70
Municipal street lighting, incandescent.....	574,023	1.93
Private street lighting.....	25,260	.08
Sales to other public service corporations.....	769,672	2.59
Irrigation power	10,232,951	34.42
Total k. w. h. sold.....	29,727,688	100.00

XIII.

The respondent company has been furnishing to the so-called Pasco, Burbank and Attalia irrigation districts or sections a large amount of electrical energy for pumping purposes and for which they have received a large amount of commercial paper of doubtful value. In the event of this paper not being paid these districts will have received power at a lower rate than those districts in which the patrons have promptly met their bills.

Opinion.

It is apparent from the foregoing tables and findings that the power rates for irrigation are not yielding their proportionate share of the income of the respondent company, and this situation is aggravated by the fact that some of the largest consumers of power are not meeting their bills promptly, if at all, yet one of the parties most delinquent has asked that it be favored by a lower rate than that called for by supplement No. 3. To this request we turn a deaf ear, and express the thought that an irrigation district or an irrigation association or company must meet its bills as promptly as the individual patrons. While we hesitate to issue an order which may result in land going unwatered and its improvement made worthless, we know of no escape if discrimination is not to be practiced. Carefully surveying respondents operations in the irrigation field, we are satisfied that supplements Nos. 3 and 4, to W. P. S. C. Tariff No. 42, are fair and reasonable.

Order.

Wherefore, It Is Ordered, That all protests to supplements Nos. 3 and 4 to W. P. S. C. Tariff No. 42, be and the same are hereby denied, and that said supplements be and the same are hereby approved and made effective as of the date of this order.

And It Is Hereby Further Ordered, That all contracts in conflict with said rates are hereby directed to be eliminated.

Witness, The Public Service Commission of Washington, this 21st day of March, 1919.

No. 4712.

The Public Service Commission of Washington, Complainant, v. Willapa Electric Company and Willapa Power Company, Respondents.

Pending in the superior court of Thurston county.

No. 4758.

The Public Service Commission of Washington, ex rel. Residents of Vashon Island, Complainants, v. Vashon Light & Power Company, Respondent.

Proceeding to test the reasonableness of a proposed increase of electric light and power rates. The cause and its disposition are set forth in the following:

Findings of Fact.**I.**

The respondent, Vashon Light and Power Company, is a corporation qualified to do business in the State of Washington and is engaged in the furnishing of electrical energy for hire on Vashon Island in the State of Washington.

II.

Issued December 1, 1918, to be effective January 1, 1919, the Vashon Light and Power Company filed with the Public Service Commission of Wash-

ington its tariff No. 3 cancelling its tariff No. 2, superseding and increasing electrical rates of the company. Complaints having been filed with the Commission challenging the reasonableness of the proposed rates, the Commission on January 1, 1919, suspended the operation thereof for a period of sixty (60) days for the purpose of investigation and hearing and on February 24, 1919, a further suspension was issued for a period of thirty (30) days.

III.

Tariff No. 3, containing the rates challenged, is as follows:

Superseding all other tariffs of this company for electric service.

Applying to all consumers on Vashon Island served by the Vashon Light and Power Company.

SCHEDULE "A"—LIGHTING RATES.

For the first 20 kilowatt hours per month, 15 cents per k. w. h.

For the next 20 kilowatt hours per month, 12 cents per k. w. h.

For the next 60 kilowatt hours per month, 10 cents per k. w. h.

For the next 60 kilowatt hours per month, 8 cents per k. w. h.

For the next 60 kilowatt hours per month, 7 cents per k. w. h.

For the next 60 kilowatt hours per month, 6 cents per k. w. h.

For all over 280 kilowatt hours per month, 5 cents per k. w. h.

Minimum monthly bill, \$1.11.

The above rates, including minimum, are subject to a discount of 10% for payment within ten (10) days from date of bill.

SCHEDULE "B"—POWER RATES.

One Horsepower and Under.

Power loads of one horsepower and below shall be taken on lighting schedule as in Sheet No. 2 Schedule "A" hereof.

One to Fifty Horsepower.

For the first eighty (80) hours' use per month of the maximum demand six and sixty-six hundredths (6.66) cents per kilowatt hour.

For all over eighty (80) hours' use per month of the maximum demand one and eleven hundredths (1.11) cents per kilowatt hour.

Demand to be taken by test or check of load.

All power bills are subject to a minimum monthly charge of \$1.11 per horsepower of demand.

These rates are subject to a discount of 10% for payment within ten days from date of bill.

Fifty Horsepower and Over.

It shall be optional with customer to take the rates as above for under fifty horsepower, or on guaranteeing a monthly minimum of not less than fifty dollars (\$50.00) may have a rate of \$1.50 per kilowatt of demand per month plus an energy charge of one (1) cent per kilowatt hour.

This rate is subject to a monthly minimum charge of \$1.50 per kilowatt of demand, this minimum is not to be discounted.

SCHEDULE "C"—HEATING AND COOKING RATES.

Where separate circuit is provided by customer, and separately metered by company, for domestic heating and cooking, a rate of three and thirty-three hundredths (3.33) cents per kilowatt hour shall apply.

Minimum monthly charge on this schedule shall be \$1.11 per kilowatt of demand.

Flat Rate for Water Heating.

Where customer is using cooking apparatus on Schedule "C" hereof, by installation of a double-throw switch so that it will be impossible to use cook-

ing apparatus and water heater at the same time, a flat rate of \$5.55 per kilowatt of demand per month shall apply for the water heater.

The above rates, including minimum, are subject to a discount of 10% for payment within ten (10) days from date of bill.

IV.

The plant now owned by respondent was started in the year 1915 at Ellipsisport, power being furnished by small steam plant and distribution lines sufficient to supply a limited number of customers. During the year 1917, the plant having become loaded to its capacity, the system was enlarged, the steam plant abandoned and a contract entered into with the Puget Sound Traction, Light and Power Company for the purchase of power delivered at the town of Des Moines on the mainland, and during January, 1918, a leased cable was installed from Des Moines to a point on the island for the purpose of transmitting the power to respondent's system. The additional transmission and distribution system consists of about thirty (30) miles of primary 6600 and 2300 volt lines.

V.

Vashon Island has an area of approximately fifty (50) square miles and its population is about five thousand (5,000).

VI.

The respondent is serving 294 lighting customers and 15 power customers, the number of lighting customers being about one-third of the permanent residents or families on the island.

VII.

The respondent's power purchased costs it an average price of two cents (2c) per K. W. H. delivered to its system ready for distribution on Vashon Island. The cost to the respondent delivered to the consumer is \$.035 per K. W. H., the difference being made up in line and transformer losses. These losses are above the average for electric systems and are due to the fact that the customers are widely separated necessitating in many cases transformers for individual customers.

VIII.

The following exhibits were prepared by the Commission's accountant, Mr. E. D. Ridley, after an investigation of the company's books and accounts:

BALANCE SHEET, DECEMBER 31, 1918.

Assets—

Organization and franchise.....			\$100,000 00
Discount on securities			3,000 00
Plant and Property:			
Cost of plant purchased.....	\$28,358 63		
Additions Nov. 1, 1915, to Dec. 31, 1917.....	18,660 31		
		\$47,018 94	
Additions, 1918	\$18,381 36		
Less steam plant dismantled and sold	12,000 00	6,381 36	53,400 00
Cash			232 35
Leased equipment			533 39
Customers' accounts			1,724 28
Deficit November 1, 1915, to December 31, 1918.....			31,514 57
Total.....			\$190,404 89

Liabilities—

Capital stock	\$100,000 00
First mortgage 6% bonds.....	30,000 00
Notes payable	26,000 00
Washington coast utilities.....	32,244 17
Customers' deposits	25 75
Accrued taxes	1,383 31
Accrued interest	751 66
Total.....	\$190,404 89

INCOME STATEMENT.

Two Months

Revenue—

	1915	1916	1917	1918
Gross operating revenue.....	\$378 45	\$3,510 69	\$6,704 22	\$10,317 50
Discount and allowances.....			373 86	448 54
Total operating revenue..	\$378 45	\$3,510 69	\$6,330 36	\$9,868 96
Net non-operating revenue...		741 21	601 61	635 44
Total revenues	\$378 45	\$4,251 90	\$6,931 97	\$10,504 40

Expenses—

Operating expenses	\$1,558 83	\$9,208 88	\$10,379 92	\$11,224 07
Taxes		1,116 76	691 00	691 56
Depreciation 3.5 per cent.....	177 34	1,213 43	1,493 20	1,735 20
Total expenses	\$1,736 17	\$11,538 57	\$12,564 12	\$13,650 83

Net income	\$1,357 72*	\$8,027 88*	\$6,233 76*	\$3,781 87*
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Average plant investment.....	\$30,400 32	\$34,669 77	\$42,662 93	\$49,577 32
Per cent. earned	26.80*	23.16*	14.61*	7.63*

* Indicates red figures.

Range of Average Monthly Consumption of Consumers in Groups (K. W. H.)	Total K. W. H.	Per Cent. by Groups	Actual Average Consumption per Consumer Throughout Year (K. W. H.)	Actual Average Consumption per Month Each Group	Average Number Consumers per Month Each Group	Percentage of Total Number of Consumers and Consumption Represented by Groups	
						Consumers Percentage	Consumption Percentage
Residential lighting 0 — 9	7,720	.....	5	643	125	47.71	13.00
Residential lighting 10 — 30	22,913	.....	16	1,969	118	45.04	53.28
Residential lighting 31 — 60	6,613	.....	39	551	14	5.34	15.37
Residential lighting all over 60	5,755	.....	96	480	5	1.91	13.35
Total residential lighting	43,001	24.4	156	3,583	202	100.00	100.00
Public building lighting 0 — 9	316	.....	4	26	7.0	63.42	91.26
Public building lighting 10 — 30	103	.....	18	9	.5	21.95	6.52
Public building lighting 31 — 60	73	.....	36	6	.17	14.63	2.22
Total public building lighting	492	.3	58	41	7.67	100.00	100.00
Total electric range	9,270	5.3	221	773	35	100.00	100.00
Total power	121,663	70.00	845	10,139	12	100.00	100.00
Residential lighting 0 — 9	43,001	.....	156	3,583	202	24.6	8.27
Public building lighting 10 — 30	492	.....	58	41	7.67	.2	2.1
Electric ranges 31 — 60	9,270	.....	221	773	35	5.3	11.1
Power all over 60	121,663	.....	845	10,139	12	69.9	5.3
Street lighting flat rate \$16.40 per month							
Totals	174,426	.....	1,280	14,536	316.69	100.00	100.00

IX.

The financial exhibits introduced by the respondent do not materially differ from the foregoing; therefore, they are not repeated.

X.

While the Commission has never made a physical appraisal of respondent's electric system, it has gone into the historical cost and in a general way the physical structure or plant in place sufficiently for the purpose of this proceeding.

XI.

The operating expenses of the respondent are reasonable for a plant of this character and the Commission so finds.

XII.

The service rendered by the respondent is not altogether satisfactory, especially during the daylight hours when heavy power loads are on, there is a fluctuation in the current to smaller users, which creates an unsatisfactory condition. The fluctuation in the service is caused principally through the operation of a planer at a shipyard used for planing ship knees.

XIII.

Under the present schedule of rates, the respondent is not earning and has not earned since its inception the bare operating expenses and taxes.

XIV.

Under the proposed schedule of rates, the respondent can not earn, in addition to its operating expenses and taxes, more than a reasonable return and the usual rate allowed for depreciation on a fair value of the used and useful plant known to be in place.

XV.

The rates named in schedule 3 of the respondent are not unreasonable under the present circumstances and conditions.

XVI.

During the year the Commission stated that it would direct its engineering department to inspect the service of the respondent and report thereon to the Commission. Subsequent to the hearing the Commission's electrical engineer, Mr. Z. E. Merrill, was assigned by the engineering department to make such inspection and his report and recommendations are as follows:

The purpose of this investigation was to determine the character of service being furnished by the Vashon Light and Power Company to its consumers on Vashon Island, Washington.

General Description of System: Three phase, 60 cycle. Power is purchased by the Vashon Light and Power Company from the Puget Sound Traction, Light and Power Company at Des Moines, Washington, located approximately 17 miles south of Seattle, and transmitted by a 3-No. 6-wire submarine cable to Vashon Island. Three 50 k. w. 13,200 to 6,600 volt transformers are installed at Des Moines and the power is metered on the 13,200 volt side. At the island end of the cable power is carried inland for a distance of approximately two and one-half miles on a wooden pole line carrying three No. 6 copper wires and three ¼-inch stranded steel wires, the two circuits being connected in parallel. From the point above mentioned, the line divides. The southern line extends south and west for a distance of two and one-half miles to the Pembroke farm where

a bank of three 75 k. v. a. 6,600 to 2,300 volt, 60 cycle transformers are installed. The northern line extends west and north a distance of nearly a mile to the village of Portage, where three 25 k. v. a., 6,600 to 2,300 volt, 60 cycle transformers are installed. The lines from the above mentioned point of division to the transformer banks, are made up of three No. 6 copper conductors. From the transformer banks, 2,300-volt lines lead in the former case to the shipyard at Dockton and the gravel pit near Pembroke, and in the latter case to Burton, Vashon, Cove, Glen Acres and other points adjacent to these places. Two 2,300-volt lines extend from each bank of transformers as will be seen by consulting map of the island, which will be found in the files of this case, and locating the places mentioned.

Distribution is made from 2,300-volt lines by 2,300 to 220-110-volt transformers located at convenient points. Practically all 2,300-volt lines are of No. 6 copper, although some $\frac{1}{4}$ " steel is being used on a couple of branches.

There is a total of $5\frac{3}{4}$ miles of 6,600-volt line and 23 miles of 2,300-volt line. Seventy-five distributing transformers of a total capacity of 312 k. w. are connected to the lines, furnishing service to approximately 300 customers over 220 and 110-volt service lines.

Description of Dockton Shipyard: Since we have a system furnishing both light and power over the same feeders, it is natural that power disturbances will be occasioned due to the starting and stopping of power-driven apparatus and the varying character of the power load. Because of the fact that the most disturbing element in the power load is the load at the Dockton shipyard a short description of this load is given below: One 60 h. p. 2,300-volt motor is connected by belt to an air compressor, one 10 h. p., two 25 h. p., and one 20 h. p., one 15 h. p., all 440-volt motors are belt connected to various saws, planers, etc., and one 15 h. p. 220-volt motor is used in the carpenter shop. Power for the 440 h. p. and 220 h. p. motors is furnished through two 10 k. w., two 7.5 k. w. and one 15 k. w. 2,300-volt to 440-220-110-volt transformers.

It is regretted that during the period covered by this investigation, the shipyard was closed down due to a strike of the employees. The shipyard company, it was learned, has a contract for furnishing three ships, one of which is practically completed and two partially so. The yard superintendent estimated that under average working conditions it would probably require a little over a year to complete the present contract.

Character of Service: Practically no complaint was made on the lighting service by any of the 30 or 40 consumers interviewed. This was no doubt due to the fact that the shipyard uses very little power during the night time. The principal complaint as to the power service was made by Mr. Covey, who is operating a saw mill about a mile north and east of Vashon. Complaints were also made by Mr. Whinnery and Mr. Danner who are operating small motors on the line southeast of Vashon. All complained of "lack of power" when the shipyard was in operation—motors could not be started or would be stalled when in operation. The two latter were small installation—2 h. p. each and will not be considered separately as their cases are similar to the former which will be considered more in detail. Neither complained of poor service except during the time of shipyard operation and at the time of the investigation their motors were operating satisfactorily.

Description of Covey Saw Mill: Power is furnished over the main distributing line from the northern or Portage bank of transformers, at 2,300 volts. The conductors from Portage to a point about $\frac{1}{4}$ mile north of Vashon are of No. 6 copper. From the point mentioned to the mill the conductors are two $\frac{1}{4}$ " steel and one $\frac{3}{16}$ " steel. Power is furnished through two 10 k. w. 2,300 to 220-volt transformers connected in V or open delta, to a 25 h. p., 220-volt motor driving a line shaft belt connected to a shingle machine, a circular saw and an 8 x 20 planer. The 220-volt service is furnished over three No. 6 copper conductors, the distance from transformers to motor being about 300 feet.

Mr. Covey's complaints relative to power were as set forth above. He complained further that the power had never been entirely satisfactory even when the shipyard was not operating. This condition existed at the time of the investigation. Voltage tests were made and in so far as the operation of the shingle machine was concerned no cause for complaint could be found. The same is true as regards the planer after it has once been started, but it was

found impossible to start this machine without throwing the entire starting load directly onto the line. The operation of the circular saw was not as satisfactory as in either of the above cases. No difficulty was encountered in the starting but it was found that in taking an 8" cut the voltage fell to 170.

There is a strong possibility that due to the belt drives and general condition of the machines, the motor is not large enough to start the planer in the approved manner or to operate the circular saw satisfactorily, although it was impossible to determine this definitely. It is certain that the transformer capacity is not sufficient for a motor of the size installed. The voltage drop and power loss in the lines as installed to the transformers should not be sufficient to cause trouble in operation, but heavier leads should be installed from the transformers to the motor.

General Conclusion: With conditions existing as at the time of the investigation, and with the changes as noted above relative to the Covey installation, it is believed fairly satisfactory service could be maintained, as this was practically the only complaint encountered. It is possible of course that even with the changes made some difficulty would be encountered due to poor regulation, but it is believed the service would be considerably improved.

With conditions such as existing when the shipyard is in operation, satisfactory operation of installations such as Mr. Covey's is practically impossible without the installation of a suitable feeder regulator by the company.

XVII.

Under date of March 25, 1919, respondent agreed to make the improvements outlined in the engineer's report as follows:

We will proceed immediately to install more transformer capacity at the Covey mill and to increase the size of the secondaries there.

With respect to the feeder regulator we find on inquiry that no regulator is at present manufactured in an outdoor type for 6,600 volts. We can obtain two single phase, 2,200-volt regulators, pole type, which could be installed on the 2,300-volt circuits at the point where they leave the Portage rack which would take care of the main portion of the island. These regulators would cost \$375 each f. o. b. Seattle or for the two installed with their instrument transformers about \$1,000.

The shipyard has not been in operation since January 21st, and we are informed that should they start again they will operate at a reduced capacity. The large timbers which have caused the trouble with the planer are all cut and the probability of their building any more ships there is very remote. For the next six months the planer would not be operating in any case during the hours of lighting.

We should be pleased to have Mr. Merrill's comments on this and if he considers it desirable can install these regulators as soon as they can be obtained but would appreciate it if the matter could be postponed until say September or October.

XVIII.

On March 25, 1919, the Public Service Commission sent a telegram to the Washington Coast Utilities as follows:

Your new rates may become effective today, March 25th. In our order we will embody work to be done to improve your service at Vashon.

Order.

Wherefore, It Is Ordered, That tariff No. 3 of the Vashon Light and Power Company be, and the same is, hereby approved as of March 25, 1919.

It Is Further Ordered, That the Vashon Light and Power Company make the following improvements to its electric system: Install at once more transformer capacity at the Covey mill and increase the size of the secondaries there; install two (2) single-phase 2200-volt regulators, pole type,

on the 2300-volt circuits at the point where said circuits leave the Portage rack, the same to be installed on or before September 15, 1919.

Witness, The Public Service Commission of Washington, this 25th day of April, 1919.

No. 1862.

The Public Service Commission of Washington, Complainant, v. Pacific Power & Light Company, Respondent.

This is a rate case instituted by the Commission on its own complaint March 2, 1915. The proceedings resulted in the determination of reasonable rates by the Commission, but the matter was subsequently taken to the superior court for Thurston county on writ of review, and thereafter the Commission's application to remand the matter for further consideration was granted. (Cf. Commission's Report for 1916, p. 100.) The cause was finally disposed of by findings and order of dismissal as follows:

The Commission having heretofore on or about March 2nd, 1915, caused to be made and filed on its own motion a complaint herein for the purpose of examining into the tariffs, schedules, supplements, rules and regulations published and filed by the respondent in respect of its electric light and power service and business in the State of Washington; and after answer and hearing thereon, the Commission having made and filed an Opinion, Findings and Order herein dated December 15, 1915; and thereafter the respondent having filed its petition in the superior court of the State of Washington in and for Thurston county for a writ of review of said order, and a writ of review having been issued by the honorable judge of said court for the purpose of reviewing and inquiring into the reasonableness and lawfulness of said findings and order; and the Commission having on or about the 26th day of July, 1916, entered an order staying the operation of said order of December 15, 1915, and directing the Attorney General to petition said superior court of Thurston county to remand to the Commission for further consideration the matters and things then under review in said court; and said superior court having on or about August 7, 1916, remanded said case and proceeding to the Commission in pursuance of the Commission's application therefor;

And it appearing to the Commission that since the remanding of the Commission's said Opinion, Findings and Order of December 15, 1915, numerous changes and adjustments have been lawfully made in the tariffs and schedules of respondent for the electric light and power service referred to in said complaint of the Commission and under consideration in said proceeding; that extensive additions, improvements and betterments have been made by the respondent to its said electric light and power property in the State of Washington employed in furnishing the service covered by said tariffs and schedules; that financial, economic and other conditions affecting the operation of enterprises such as that of the respondent and material to any proper consideration of the matters referred to in said proceeding have substantially changed since the filing of said complaint and the holding of the hearing thereon; and that because of the changed conditions aforementioned and otherwise, the voluminous record and exhibits

in said proceeding do not reflect the facts and conditions pertaining to the conduct of respondents said electric light and power business at the present time:

Now, therefore, the Commission, by reason of the foregoing and all of the facts and circumstances of this case, is of the opinion and so finds that it would not be reasonable, just or practicable for the Commission to proceed further on the complaint herein or to make any further order upon said complaint or upon the record, exhibits and proceedings herein, except a final order of dismissal of said complaint and of all proceedings taken herein subsequent thereto.

Now, Therefore, It Is Hereby Ordered, That said Opinion, Findings and Order of the Commission dated December 15, 1915, be and the same hereby are vacated and annulled, and that the complaint of the Public Service Commission of Washington against Pacific Power & Light Company in this proceeding and all other complaints or matters, formal or informal, consolidated or considered in connection with said complaint of the Public Service Commission of Washington in this proceeding, be, and the same hereby are finally dismissed; but this dismissal shall be without prejudice to the filing or consideration of any complaint or complaints that may hereafter be lawfully filed by any complainant or complainants in respect of any tariff, schedule, rate or rates, rules or regulations of the respondent, Pacific Power & Light Company, in connection with the electric light and power business of said respondent in the State of Washington.

Witness, The Public Service Commission of Washington, this 25th day of June, 1919.

No. 4770.

City of Leavenworth, Complainant, v. Tumwater Light and Water Company, Respondent.

January 20, 1919, the city of Leavenworth filed with the Commission its resolution, setting forth a raise in the power rates charged by respondent, alleging that former rates should have been reduced rather than raised, and invoking the aid of the Commission in this behalf to establish just and equitable rates. Investigation was made and a report prepared. The cause was disposed of as follows:

This matter coming on for hearing before the Commission this 24th day of July, 1919, and it appearing to the Commission after an investigation of the books and affairs of respondent, that said respondent has not in the past or is at present, making an unreasonable return on its investment, and it further appearing that complainant having given no further consideration of the Commission's communications of February 25 and March 31, 1919, requesting their attitude toward prosecuting cause further,

It Is Therefore Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington this 24th day of July, 1919.

No. 1688.

The Public Service Commission of Washington, Complainant, v. Pacific Power & Light Company, a Corporation, Respondent.

Valuation proceedings instituted by the Commission. The cause has been disposed of by the following:

This cause came on for hearing at Kennewick, Washington, on the 11th day of July, 1919, at the hour of 11:00 o'clock a. m., before Chairman E. F. Blaine and Commissioner Frank R. Spinning; D. F. McCurrach, chief engineer, and E. J. Delbridge, official reporter of the Commission, being also present.

The parties were represented as follows: City of Prosser—By A. G. McNeill, mayor, and B. P. Lawrence, councilman. Respondent—By J. A. Laing, its attorney; J. H. Siegfried, superintendent of power; and A. L. Strickland, district manager.

The Commission heretofore made and entered, under date of January 7, 1915, certain findings of fact fixing the value of the property used by the respondent company in its electric light and power business in the State of Washington. (Cf. Commission's Report for 1915, p. 110.) In order to bring such original findings and valuation up to date, the Commission gave due notice of and held such further hearing at the time and place aforesaid, and having heard the evidence and testimony introduced at such hearing, makes the following

Findings of Fact.**I.**

The Pacific Power & Light Company is a corporation incorporated under the laws of the state of Maine, and, among other things, owns and operates for hire, electric light and power properties in Klickitat, Yakima, Kittitas, Benton, Franklin, Grant, Adams, Walla Walla, Garfield and Columbia counties, in the State of Washington.

II.

All of said electric light and power property of the respondent in the State of Washington, other than the property in Klickitat county, is physically connected by a network of transmission and distributing lines and is operated as one electrical system, herein referred to as the Yakima-Walla Walla system. This Yakima-Walla Walla system includes a new 66000-volt transmission line constructed by respondent from Pasco to Lind, Washington, to connect with the lines of the Washington Water Power Company, thereby making available a large additional source of power supply for respondent's business. The property in Klickitat county consists of two electrical generating plants and systems not connected with each other or with said Yakima-Walla Walla system, referred to herein as the Goldendale and White Salmon systems, respectively, and of a certain transmission line referred to by the respondent as its Hood River-Condit line, connecting the power system of the respondent in Hood River and Wasco counties, Oregon, with the electrical system of Northwestern Electric Company at the Condit plant of the latter company near the town of Husum, Washington. Said Hood River-Condit line has been constructed and placed in operation by the respondent since the date of the original hearing and findings herein and

no part of said Hood River-Condit line, or the expenses therefor, was included in such original findings. The property in Washington under consideration in this proceeding is therefore classified and referred to herein as follows:

Yakima-Walla Walla System.
Goldendale System.
White Salmon System.
Hood River-Condit Transmission Line.

III.

The Commission found the value of the respondent's used and useful electric light and power property within the State of Washington as of June 30, 1913, to be \$4,700,000.00.

IV.

Between said June 30, 1913, and December 31, 1918, the respondent has made additions, extensions, betterments and improvements to its electric light and power property in this state for the purpose of extending and improving its service. In addition, the respondent has put to use as part of its new substation property at Pasco, certain real estate, the value of which was not included in the value of the used and useful property in the original findings as not then in use, though appraised at \$19,000.00. This value should be and has been included with the value of other additions and betterments as of December 31, 1918. The total cost of all of such additions, betterments, extensions and improvements between June 30, 1913, and December 31, 1918, is the sum of \$1,604,067.00 apportioned among the various systems of the respondent in the State of Washington as follows:

Yakima-Walla Walla System.....	\$1,481,079 00
Goldendale System	10,123 00
White Salmon System.....	16,330 00
Hood River-Condit Transmission Line.....	96,535 00
Total.....	\$1,604,067 00

V.

The Commission hereby finds the value of the property situated within the State of Washington owned and used by the respondent in the conduct of its electric light and power business as of December 31, 1918, to be the sum of \$6,304,067.00; and said sum is apportioned among the respondent's electric systems in the State of Washington and is made up as follows:

Yakima-Walla Walla System:

Power plants	\$2,221,042 00
Transmission lines	1,384,601 00
Substations	662,989 00
Distributing lines	1,775,021 00
Total Yakima-Walla Walla System.....	\$6,043,653 00

Goldendale System:

Power plants	\$38,917 00
Substations	2,581 00
Distributing lines	54,098 00
Total Goldendale System.....	95,596 00

White Salmon System:

Power plants	\$19,085 00
Substations	7,081 00
Distribution lines	42,117 00

Total White Salmon System..... 68,283 00

Hood River-Condit Transmission Line..... 96,535 00

Total State of Washington electric systems
as of December 31, 1918..... \$6,304,067 00

VI.

The relative value of the use to which the property of the respondent is put in the performance of intrastate and interstate business, respectively, is as follows:

The Yakima-Walla Walla system of the respondent in the State of Washington is connected by a transmission line about fifteen miles in length extending from the city of Walla Walla to the Walla Walla river power plant of the respondent in Umatilla county, Oregon. This Walla Walla river power plant supplies the power for respondent's system in the Milton, Free-water, Athena, Adams, Helix, Pendleton and other districts in Umatilla county, Oregon. It is the only Oregon plant of the respondent employed in supplying said Umatilla county system and the entire investment therein is necessary for such Oregon business.

This connecting transmission line provides the usual advantages accruing from the interconnection of power plants and systems and permits the interchange of energy and service between the systems in the two states when one or the other of these systems may have surplus power available for the other's use. The interchange of service made possible by such connection is mutually beneficial and valuable to the Washington and Oregon business of the respondent. This property of the respondent is properly divided at the state boundary. The Commission therefore finds that all of the property in said Yakima-Walla Walla system in the State of Washington, including the Washington portion of said connecting transmission line, having a total value as of December 31, 1918, of \$6,043,653.00, is used in and essential to the intrastate business of the respondent within the State of Washington.

VII.

The Goldendale and White Salmon systems and property of respondent valued as of December 31, 1918, at \$95,596.00 and \$68,283.00, respectively, are used exclusively in the performance of intrastate business within the State of Washington. That portion of the Hood River-Condit transmission line within the State of Washington having a value as above found by the Commission of \$96,535.00, is not now used substantially by the respondent in the performance of Washington intrastate business. At present it is used almost wholly for the purpose of providing a means of selling surplus energy generated at respondent's plants in Hood River and Wasco counties, Oregon, and in turn, of securing surplus energy from Northwestern Electric Company's Husum plant when required for respondent's business in said Hood River and Wasco counties, and the earnings and expenses of said line are treated by respondent as part of its business in the state of Oregon. Until

such conditions change, said property while physically located within the State of Washington, will be considered as used in connection with and as a part of the Oregon business of respondent and as not employed in intrastate business of the respondent within the State of Washington.

VIII.

The Commission therefore finds that the value of the property of the respondent company situated within the State of Washington and used for the public convenience of intrastate electric light and power business in the State of Washington, as of December 31, 1918, is the sum of \$6,207,532.00, being the sum of the values specified in Finding V above for the Yakima-Walla Walla, Goldendale and White Salmon systems of the respondent in said state.

Order.

Wherefore, It Is Ordered, That the rate base of the electric light and power properties of the respondent company in the State of Washington as of December 31, 1918, be, and the same is, hereby fixed at the sum of \$6,207,532.00, apportioned as follows:

Yakima-Walla Walla System.....	\$6,043,653 00
Goldendale System	95,596 00
White Salmon System.....	68,283 00

Witness, The Public Service Commission of Washington this 15th day of July, 1919.

No. 4857.

The Public Service Commission of Washington, Complainant, v. Pacific Northwest Traction Company, Puget Sound Traction, Light and Power Company, Puget Sound Electric Railway, Puget Sound International Railway and Power Company, and Tacoma Railway and Power Company, Respondents.

Respondents filed new tariffs providing increased rates for new installations. Same were suspended by the Commission pending investigation. Objection to the suspension by interested consumers caused the Commission to enter the following:

It appearing to the Commission that on August 6, 1919, an order was entered in the above matter suspending the operation and effect of the following enumerated tariffs of the above respondents for a period of sixty days from the effective date of said tariffs: Pacific Northwest Traction Company's schedule A-1 to tariff No. 3, southern division; Pacific Northwest Traction Company's schedule A-1 to tariff No. 2, northern division; Puget Sound Traction, Light and Power Company's schedule A-3 to tariff No. 12, Bellingham division; Puget Sound Electric Railway Company's schedule A-2 to tariff No. 2; Puget Sound Traction, Light and Power Company's schedule A-1 to tariff No. 11, Bellingham division; Puget Sound Traction, Light and Power Company's schedule A-3 to tariff No. 7, Seattle division; Puget Sound Traction, Light and Power Company's schedule A-2 to tariff No. 10, Seattle division; Puget Sound International Railway and Power Company's schedule A-1 to tariff No. 4; Puget Sound Traction, Light and Power Company's

schedule A-1 to tariff No. 9, Tacoma division; Tacoma Railway and Power Company's schedule A-1 to tariff No. 3, effective August 8, 1919.

On August 19, 1919, application was made to the Commission for the rescinding of said suspension order, and it appearing to the Commission that 224 patrons have applied to the respective companies for immediate service under the proposed tariff, and that 29 of said patrons have actually paid the proposed required advanced charges; that said applying patrons represent nine communities, cities and towns, including the city of Seattle, and that said patrons have petitioned this Commission to allow said tariffs to become immediately effective, and it appearing that if the service requested by said patrons is to be furnished that it can be done before the rainy season sets in more expeditiously and at a less cost than if delayed until the expiration of the suspension order, and it appearing further that protests of a general nature have been filed by three cities or towns; and it appearing to the Commission that a present necessity exists for the rescinding of said suspension order,

It Is Hereby Ordered, That said suspension order of August 6, 1919, in so far as it applies to the tariffs above mentioned, be and the same is hereby rescinded and cancelled, subject, however, to the following:

(1) That pending a final hearing upon any formal complaint that may be made concerning the provisions of any of said tariffs, the respondent companies carry a separate account in their records showing by item all receipts and expenditures received or expended on account of the matters and things contained in said tariffs.

(2) That should formal complaint be made against any of the tariffs herein named, the burden of proof of the reasonableness of said rates or charges remain upon the respondent companies.

Witness, The Public Service Commission of Washington this 26th day of August, 1919.

No. 4886.

Residents of Chelan and Douglas Counties, Complainants, v. Wenatchee Valley Gas and Electric Company, a Corporation, Respondent.

By petition filed June 6, 1919, power users of the Wenatchee Valley Gas and Electric Company complained of the service furnished and the rates present and proposed of the respondent. Investigation was made, and a hearing held at Wenatchee, and the Commission entered its findings and order as to valuation, rates and service. The matter is still pending. The proceedings to date are set forth as follows:

This proceeding was instituted for the purpose of determining the value of the respondent's electrical property devoted to public use.

The description of the property to be valued is as follows:

"The property owned and operated by the Wenatchee Valley Gas & Electric Company is located in the counties of Chelan and Douglas, in the north central part of the state. The electrical generative system is composed of two hydro-electric developments, one at Dryden on the Wenatchee river and one at Entiat on the Entiat river. Power is also purchased from the Chelan Falls Power Company, which has a hydro-electric plant on the

Chelan river near its confluence with the Columbia. Transmission lines from the three plants mentioned above serve the towns of Wenatchee, Dryden, Cashmere, Monitor, Entiat, Waterville and Orondo, and the country adjacent thereto.

The Dryden plant, known as power plant No. 3 and located approximately eighteen miles west of the city of Wenatchee, has a total hydro-development of 2100 h. p. and an electrical development of 1200 kilowatts. Two units are installed, each consisting of a 1050 h. p. S. Morgan Smith hydraulic turbine direct connected to a 600-kilowatt, 2300-volt, 3-phase Westinghouse alternating current generator. Excitation for each generator is furnished by a 30-kilowatt, 125-volt, direct current Westinghouse generator, belt-driven from the main generator shaft. The usual switches, switchboard, etc., are installed conveniently in the power plant building, while the transformers for stepping up the voltage from 2300 to 16,500, the transmission line voltage, are housed in a separate building adjacent to the plant.

Water for operating the above units is taken from the Wenatchee river about a mile above the plant. At this point two rock-filled, log crib dams have been constructed, one for diverting the water from the main channel of the river to a side channel and one across the latter channel to divert the water to the power canal. At the canal entrance suitable gates are installed for regulating the flow. The water is carried by the canal direct to the power plant where it passes through regulating gates and separate wood stave penstocks, to the turbines and then discharged back into the river. The water reaches the turbines under a head of 51 feet. The canal, known as the High Line Canal, besides carrying water for the power plant, also carries water for irrigation purposes and continues on down the valley to below the city of Wenatchee. Its carrying capacity is approximately six hundred second feet, of which two hundred are reserved for irrigation purposes. Ownership of the head works and of the canal proper from its source to approximately one mile below the plant, is vested in the Wenatchee Valley Gas & Electric Company. Suitable spillways have been provided both above and below the plant for regulating the amount of water carried. In the transformer house there is installed six 200 kilovolt-ampere, 33000-16500/2300 volt, single-phase Westinghouse transformers, together with the necessary electrolytic lightning arrester, choke coils, disconnecting switches, etc.

Both the transformer house and the power plant proper are of good substantial reinforced concrete construction. Suitable wooden dwelling houses are provided for the power plant attendants.

The Dryden plant, from the records of the company, has maintained a load of 1300 kilowatts for several hours at a number of different times. The present installed capacity, however, practically exhausts the power water available during low water periods. During high water periods, the rated capacity is considerably lowered due to a backing up of the water in the tail race and thus lowering the efficiency of the wheels.

The Entiat power plant, known as power plant No. 2, is located approximately twenty-two miles north of the city of Wenatchee on the Entiat river,

about a mile from its confluence with the Columbia. Its development consists of two direct connected units of the same capacity. Each turbine is rated at 1020 h. p. and is direct connected to a 550 kilovolt-ampere, 2300-volt, three-phase alternating current generator. The generators were furnished by the Westinghouse Electric & Manufacturing Company and the turbines by the S. Morgan Smith Company. Excitation is furnished by two 30-kilowatt, 125-volt direct current generators, one of which is belt-driven from a main generator shaft, while the other is direct connected to a 60 h. p. S. Morgan Smith hydraulic turbine. The usual switches, switchboard, etc., and also the step-up transformers are installed within the main power plant building.

Water for supplying the turbines at the Entiat plant is diverted from the Entiat river by a shallow rock and timber dam, one and one-half miles above the plant. Suitable head gates are provided at this point and control gates with spillway are installed at a point lower on the canal. From the dam, the water is carried by open canal and by an eight-foot wood stave penstock, 1750 feet in length, to the turbines, both of which receive water from the same penstock. The water is discharged directly into the river. The head under which the Entiat plant operates is 78 feet.

The power plant building is of substantial reinforced concrete construction and a wood frame dwelling house is provided for the chief operator.

Due to a shortage of water, the capacity of the Entiat plant is considerably curtailed during low water.

The transmission system comprises two main lines, one extending from the Entiat plant to the city of Wenatchee, and known as transmission line No. 2, and one from the Dryden plant to Wenatchee, known as transmission line No. 3. The voltage of the current carried to Wenatchee on these two lines is 16,500. At Wenatchee the two lines are tied in together and current is furnished for a distribution at 2200 and lower voltages, for the city and country adjacent to it, through transformers, etc., located at substation No. 1. This substation is located in a part of the company office building, which is a substantial brick structure. It has installed three 200-kilowatt and three 150-kilowatt, 33000-16500/2300 volt single-phase transformers, and one 600 kilovolt-ampere, 33000-16500/2300 volt, three-phase transformer, electrolytic lightning arresters, disconnecting switches, and the necessary switchboard, constant current transformers, regulators, etc., for the control of the distribution circuits.

Considerable energy is taken from both the transmission lines between their points of origin and Wenatchee for power and lighting purposes. This energy is distributed through standard outdoor type substations consisting of transformers, switches, etc.

A third transmission line, known as transmission line No. 5, extends from the Entiat plant, across the river to the town of Waterville. The voltage of this line is 6600 and a suitable substation is maintained at Waterville for transforming and measuring the power. The Wenatchee Valley Gas & Electric Company, however, owns none of the distribution system in Waterville. A branch from the No. 5 transmission line extends north on the east bank of the Columbia a distance of approximately four miles, furnishing power for several irrigation pumping installations.

The Chelan Falls power plant, owned by the Chelan Falls Power Company, is located approximately twenty miles north of the Entiat plant. This plant was installed in 1918 and the development consists of one S. Morgan Smith hydraulic turbine direct connected to a 1000 kilovolt-ampere, 2300-volt, three-phase, 60-cycle Allis Chalmers generator. The usual switchboard is installed within the plant building and the voltage is stepped up to 16500 volts for transmission purposes by two 333 kilovolt-ampere, 33000-16500/2300 volt single-phase transformers located outside the plant. The 16500 volt transmission line extends to a point near the Entiat plant where it is tied in with transmission line No. 3. Power over this line is furnished to the Wenatchee Valley Gas & Electric Company at 16500 volts. Some distribution is made by the latter company in the territory adjacent to the line, outdoor substations being used to reduce the voltage to 2500 volts.

Besides the market furnished by the towns above mentioned, a large amount of power is furnished in the rural districts for irrigation pumping, the principal industry being fruit raising. With a total estimated present demand of approximately 2300 kilowatts on the entire system probably 50 per cent is due to the irrigation load. This load is imposed upon the system during the months of May to September, inclusive."

The financial history of the respondent company is as follows:

"The first meeting of the incorporators of the Wenatchee Valley Gas & Electric Company was held September 15, 1910. Subscriptions for the entire capital stock of the corporation (\$565,000) were received from Wenatchee Electric Company, a Washington corporation (2900 shares), and Entiat Light & Power Company, a Washington corporation (2750 shares); the new corporation agreeing to assume all obligations of its predecessors, save indebtedness for gas equipment purchased by Wenatchee Electric Company, and accept the property, plants, etc., of the subscribers as consideration. The franchise conveyed by ordinance No. 276, city of Wenatchee, to Entiat Light & Power Company, was not acquired. The property of the Wenatchee Electric Company was taken subject to the lien of its trust deed to Scandinavian American Bank of Seattle to secure payment of bonds of \$300,000.00 par value pledged to Spokane & Eastern Trust Company as collateral to secure payment of notes in the sum of \$127,500.00. The property of the Entiat Light & Power Company was taken subject to bonded indebtedness of \$175,000.00.

At the time of the merger, the Wenatchee Electric Company was the owner of a reserve steam plant in Wenatchee, power plant No. 1 on Quiltoc creek, a survey on Icicle river and Snow creek, known as power plant No. 4, transmission line No. 1 from power plant No. 1 to Wenatchee, substation No. 1 at Wenatchee, a distribution and municipal street lighting system in Wenatchee, together with franchises in Wenatchee and Chelan county, and meters, transformers, shop and office equipment. The Entiat Light & Power Company was the owner of a reserve steam plant in Wenatchee, power transmission line No. 2, power plant No. 2 at Entiat, transmission line No. 4 from the east end of the Columbia river bridge at Wenatchee and extending south and east, substations No. 2 at Orondo, No. 3 at Longview, and No. 4 at Sunnyslope, a distribution system in Wenatchee and along the Columbia river north of Wenatchee, as well as franchises, and the necessary meters, transformers, shop and office equipment. The property, property rights and

franchises acquired at this time are more particularly described in a certain general first mortgage of date October 1, 1910, given by the Wenatchee Valley Gas & Electric Company to the Spokane & Eastern Trust Company, as trustee, to secure the issue of two million dollars of bonds.

November 15, 1910, the stockholders by resolution authorized the purchase of the property, plant, franchises and property rights of the Valley Power Company, a Washington corporation, and the deal was subsequently consummated for a consideration of \$283,477.00, \$50,000 of which was paid in cash, \$213,000 in bonds, and the balance by the assumption of obligations against the property acquired. The Valley Power Company organized in 1908 by W. T. Clark, F. M. Scheble and Marvin Chase, was the successor of the Wenatchee Canal Company, a concern possessed of water rights in the Wenatchee river for irrigation purposes. The Valley Power Company, while under ownership of W. T. Clark and associates, began the development of a hydro-electric unit at Dryden, the present power plant No. 3, and was proceeding with construction of a transmission line to Wenatchee, when it was acquired by W. D. Lovell, H. Remley, and R. T. Lovell, for a consideration of \$30,000.00 (\$10,000.00 cash and assumption of a \$20,000.00 mortgage). This deal took place on or about January, 1909. These parties continued to improve the plant and extend the lines of the Valley Power Company until its acquisition by the Wenatchee Valley Gas & Electric Company.

A stockholders' meeting of October 24, 1911, authorized the increase of the capital stock to 7500 shares, par value \$100.00. This was in aid of the purchase of the property of the Brown Electric Company, authorized August 22, 1911. By this transaction, the Wenatchee Valley Gas & Electric Company acquired, together with the incident franchises and property rights, power plant No. 5 on the lower Entiat river, transmission line No. 5, to Entiat to Waterville, and substation No. 8 at Waterville, for a consideration of \$97,843.49, for \$55,800.00 of which George D. Brown accepted stock of the Wenatchee Valley Gas & Electric Company, the balance being indebtedness assumed."

After a full hearing and from all of the evidence submitted the Commission makes the following Findings of Fact as to the value of respondent's electrical property devoted to public use, as of December 31, 1918:

I.

The Wenatchee Valley Gas & Electric Company is a corporation engaged in the generation, manufacture, sale and distribution for hire, of gas and electricity wholly within the State of Washington, with its principal place of business at Wenatchee, Washington, and owns, controls, maintains and operates an electric plant in the State of Washington.

II.

The original cost of construction of the respondent's property, used and useful, is \$783,988.00.

III.

The cost of reproduction, in its present condition, of the respondent's properties is \$702,589.00, exclusive of water rights.

IV.

The cost of reproducing the property in its present condition, less depreciation, at an annual percentage of 3.5 per cent, is \$572,000.00.

V.

The amount of capital stock outstanding is \$620,800.00, there being \$129,200.00 in treasury stock.

VI.

There being no transactions in the stock of the respondent company, the Commission is unable to determine its market value.

VII.

The outstanding funded indebtedness of the respondent company is \$857,812.00.

VIII.

The total market value of the property of the respondent used for the public convenience within this state is \$800,000.00.

IX.

No dividends have been paid on the respondent's stock. During the years 1917 and 1918 sufficient money was earned to pay interest on bonded indebtedness.

X.

The probable earning capacity of the respondent under the rates now charged by it is approximately 8 per cent and the sum required to meet service and operating expenses is \$77,680.13.

XI.

The density of traffic and of the population tributary to the respondent's plant and the conditions which tend to show whether such traffic and population is liable to continue, increase or diminish are: The gross earnings have increased from 1915 to 1918 approximately \$38,296.00, or an average annual increase in the three years of approximately \$12,765.00. That the Wenatchee valley, which is served by the respondent and which depends upon the respondent for its electric energy, is and has been showing a material development and will continue to do so. One of the principal industries of the valley served by the respondent is fruit growing, there now being 2,351 acres under irrigation. The number of light and power consumers who are patrons of the Wenatchee Valley Gas & Electric Company have increased from 1,463 in 1915 to 2,060 in 1918. Practically 50 per cent of the power sold by the respondent is for the purpose of pumping water onto the orchard tracts and the number of acres of orchard in that valley are not only increasing yearly but as the orchards develop they require additional water and power each year. The maximum demand on the entire system of the respondent company for 1918 was 1,870 k. w., the maximum demand in 1919 was 2,315 k. w.

XII.

The expenditures already made by the respondent in the actual construction of its property were such as were justified by the then existing conditions. The expenditures, however, have not been reasonable for the present needs of the company and have not been such as might reasonably be expected in the immediate future. The expenditures made by the com-

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pany in purchasing the properties of the Valley Power Company were not justified by the then existing conditions and such as might reasonably be expected in the immediate future.

XIII.

From Commission's exhibit No. 1, a calculation of the value of water rights has been made, resulting in the sum of \$31,500.00, and on page 22 of the same exhibit is shown a calculation of the development costs amounting to \$68,775.00 on a 6 per cent basis and \$164,367.00 on a 7 per cent basis. The respondent has other water rights situated on Icicle creek, but which are as yet undeveloped and are not at present put to public use.

XIV.

From a consideration of all of the foregoing findings and all of the evidence introduced at the hearing, the Commission concludes and its order is that the total value of the respondent's light and power system devoted to a public use is \$780,000.00, as a basis for rate making.

Witness, The Public Service Commission of Washington, this 25th day of September, 1919.

Simultaneously with the foregoing, there was entered the following Findings and Order affecting the rate controversy involved in the proceeding:

In this cause the complainants challenged the reasonableness of the increase in rates of the respondent company as shown in their tariff No. 2.

From all the testimony introduced at said hearing, the Commission makes the following Findings of Fact:

Findings of Fact.

I.

That the Wenatchee Valley Gas and Electric Company is a corporation engaged in the business of generating, manufacturing and distributing of electricity for hire within the State of Washington, and owns, operates and maintains an electric plant in the Wenatchee valley with its principal place of business at Wenatchee, Washington.

II.

That the operating expenses, operating revenues with deductions of taxes and depreciation, the amount earned, the average plant cost and the rate of return are as shown in the following table:

	1911	1912	1913
Operating revenues	\$76,391 90	\$94,670 45	\$98,913 71
Operating expenses	52,591 20	39,865 33	32,382 33
Gross income	\$23,800 70	\$54,705 12	\$66,531 38
Deductions:			
Taxes	\$1,994 44	\$5,504 34	\$5,991 79
Depreciation 3.5%	20,853 11	23,860 73	26,905 06
Totals	\$22,847 55	\$29,365 07	\$32,896 85
Amount earned	\$953 15	\$25,340 05	\$33,634 53
Average plant cost.....	\$595,803 00	\$681,735 00	\$768,716 00
Rate of return.....	0.16%	3.72%	4.37%

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	1914	1915	1916
Operating revenues	\$108,045 16	\$104,133 03	\$111,738 91
Operating expenses	35,122 17	41,340 96	* 45,068 42
Gross income	\$72,923 01	\$62,792 07	\$66,670 49
Deductions:			
Taxes	\$7,930 62	\$5,834 07	\$6,854 34
Depreciation 3.5%	27,404 62	27,305 57	27,035 30
Totals	\$35,335 24	\$33,139 64	\$33,889 64
Amount earned	\$37,587 77	\$29,652 43	\$32,780 85
Average plant cost.....	\$782,989 00	\$780,159 00	\$772,437 00
Rate of return.....	4.80 %	3.80 %	4.24 %
		1917	1918
Operating revenues		\$131,057 25	\$142,429 70
Operating expenses		41,614 05	41,287 60
Gross income		\$89,443 20	\$101,142 10
Deductions:			
Taxes		\$7,806 45	\$9,025 50
Depreciation 3.5%		27,100 68	27,367 03
Totals		\$34,907 13	\$36,392 53
Amount earned		\$54,536 07	\$64,749 57
Average plant cost.....		\$774,305 00	\$781,915 00
Rate of return.....		7.04 %	8.27 %

*\$15,312.34 deducted from operating expenses (included in depreciation).

A consideration of the item "rate of return" for the years 1911 to 1918, inclusive, shows, with the exception of the years 1915 and 1916, a steady increase.

III.

That the rate base of this company fixed by the Commission in a separate order, is \$780,000.00, and upon that rate base, with the apparent steady growth and development of the respondent's business, a just, reasonable and sufficient return is now being made and will continue to be made under the existing rates.

IV.

That upon the rate base fixed by the Commission, the proposed rates would give the company more than a fair return, and are unjust, unreasonable and more than sufficient.

V.

That the entire present generating plant or system of the respondent is saturated and is not sufficient to take care of the demands now being made upon it for electrical energy, and that there is a growing demand for further electrical energy in the community served exclusively by the respondent.

VI.

That the principal industry in the territory served by the respondent is that of fruit growing, which depends exclusively upon the respondent for

continuous power during the irrigating season to pump water into the orchards; that this industry is not only increasing in acreage but as the orchards develop they will require additional water, and, unless the respondent enlarges its generating system or procures additional power from other sources, it cannot meet the needs of the community it serves.

VII.

That to meet the demands of the present consumers and the natural growth and development of the community, the respondent should procure or develop 1,000 additional horsepower. When this additional power is furnished, if the additional revenues derived therefrom are insufficient to constitute a reasonable return on the necessary investment for such additional development, a raise in rates sufficient to afford a reasonable return on a fair value of the company's investment including the new installation would logically follow.

VIII.

That 1,000 additional horsepower can be developed or procured by the respondent at a reasonable cost to the respondent.

IX.

The respondent has not kept its accounts in detail in accordance with the classification of accounts prescribed by the Public Service Commission of Washington for electric light and power companies.

From the foregoing findings of fact, the Commission concludes, that the proposed rates of the respondent are unreasonable and excessive, and that the respondent must procure additional generating capacity or additional power.

Order.

Wherefore, It Is Ordered, That the application of the respondent for an increase in rates as shown in its tariff No. 2 be, and the same is, hereby denied.

It Is Further Ordered, That the respondent either secure or develop additional generating capacity or procure additional power in an amount not less than one thousand (1,000) horsepower, and that this be done before April 1, 1920.

Witness, The Public Service Commission of Washington, this 25th day of September, 1919.

No. 4903.

The Public Service Commission of Washington, Complainant, v. D. R. McNeil, Respondent.

Complaint by patrons of the Water, Light and Power Company of Molson, Washington, praying an investigation of the rates charged and service furnished by respondent, owner of the utility. The findings and order of the Commission were:

I.

That the respondent, D. R. McNeil, is the owner of an electric plant and a water system in the village of Molson, Washington, and disposes of products of those two systems for hire to the public.

II.

That the service rendered by the respondent in both the light plant and water system is inadequate, inefficient and unsafe.

III.

That from an examination of the electric plant, the Commission adopts as a rate base in this proceeding \$3,679, and upon the water system \$3,671. These figures are based upon the cost of reproduction new as of September 30, 1919, taking normal prices as of construction period 1914-1915.

IV.

That the rates proposed in tariff No. 1, W. P. S. C. No. 1, for the electric system are unjust, unreasonable and more than sufficient.

V.

That the rates named in tariff No. 1, W. P. S. C. No. 1, for the water system are just, fair, reasonable and sufficient.

VI.

That the following schedule of rates for the electric system is just, fair, reasonable and sufficient:

Residence and Commercial Lighting:

Meter Rate—\$0.20 per k. w. hour.

Minimum Charge—\$1.25 per month.

Flat Rate—\$0.01 per month per connected watt.

Minimum Charge—\$1.25 per month.

Residence and commercial rates apply to all appliances including motors of less than one horsepower.

Motion Picture Show: \$0.20 per k. w. hour.

Minimum Charge—\$25.00 per month.

Commercial Power Rate (Elevator): \$0.08 per k. w. hour.

Minimum Charge (during season)—\$40.00 per month.

Commercial Power Rate (Pump):

Flat Rate—\$5.00 per month.

Municipal Lighting Rate:

Flat Rate—\$1.00 per month per 60-watt lamp.

VII.

That there must be a complete overhauling of the electric plant so that the same may be placed in a condition to render safe, adequate and sufficient service, in particular as follows:

The installation of a new drive belt and of proper safeguards over and around the same, and such other changes and improvements as will bring about safe, adequate and sufficient service.

VIII.

That to place the water system in a condition that safe, adequate and sufficient service may be rendered, the respondent be required to make the following improvements:

That on or before July 1, 1920, the respondent should secure an additional supply of pure water to meet the requirements of his system, and that the present source of the water supply should be cleaned out so that additional water may be secured, and that the water will be pure and clean, and that the wooden tank on the hill be repaired and calked so as to make it reasonably water-tight, or in lieu of repairs to the tank, a concrete-lined reservoir of equal or greater capacity be constructed at some suitable location, and that the system in general be given closer attention with regard to maintenance.

IX.

That the respondent has failed to keep his books, records and accounts according to the classification specified by the Public Service Commission of Washington, and that he be required to keep his books, records and accounts in accordance with such requirements.

Order.

From the foregoing findings the Commission makes the following Order:
It Is Hereby Ordered, That the respondent publish and charge the rates provided in tariff No. 1, W. P. S. C. No. 1, as to the water system.

That the respondent publish and charge the following rates for the product of his electric plant:

Residence and Commercial Lighting:

Meter Rate—\$0.20 per k. w. hour.

Minimum Charge—\$1.25 per month.

Flat Rate—\$0.01 per month per connected watt.

Minimum Charge—\$1.25 per month.

Residence and commercial rates apply to all appliances including motors of less than one horsepower.

Motion Picture Show: \$0.20 per k. w. hour.

Minimum Charge—\$25.00 per month.

Commercial Power Rate (Elevator): \$0.08 per k. w. hour.

Minimum Charge (during season)—\$40.00 per month.

Commercial Power Rate (Pump):

Flat Rate—\$5.00 per month.

Municipal Lighting Rate:

Flat Rate—\$1.00 per month per 60-watt lamp.

That on or before July 1, 1920, the respondent secure an additional supply of pure water to meet the requirements of his system, and that the present source of water supply be cleaned out so that additional water may be secured, and that the water will be pure and clean; that the wooden tank on the hill be repaired and calked so as to make it reasonably water-tight, or in lieu of repairs to the tank, a concrete-lined reservoir of equal or greater capacity be constructed at some suitable location, and that the system in general be given closer attention with regard to maintenance.

That there must be a complete overhauling of the electric plant so that the same may be placed in a condition to render safe, adequate and sufficient service.

That a new drive belt with proper safeguards over and around the same be installed, and that such other changes and improvements be made as will bring about safe, adequate and sufficient service.

And It Is Further Ordered, That respondent keep his books, records and accounts in accordance with the classification of accounts as prescribed by this Commission.

Witness, The Public Service Commission of Washington, this 25th day of November, 1919.

ORDERS IN CASES AFFECTING WATER PLANTS.

(An account of the case of The Public Service Commission of Washington v. D. R. McNeill, No. 4903, will be found under the heading "Cases Affecting Electric Light and Power Companies.")

No. 4781.

The City of Bellingham and Eighty-six Water Consumers, Complainants, v. Fairhaven City Water & Power Company, Respondent.

Protest of increased water rates.

The cause and its disposition are fully set forth in the Findings and Order as follows:

I.

The city of Bellingham is a municipal corporation of the second class located in Whatcom county, Washington.

II.

The Fairhaven City Water and Power Company is a corporation organized and existing under the laws of the State of Washington, and is engaged in furnishing water for domestic and other purposes to the city of Bellingham and the inhabitants thereof.

III.

On September 25, 1918, the respondent filed with this Commission a schedule of water rates, being W. P. S. C. No. 3, to become effective October 25, 1918, cancelling and superseding certain items in W. P. S. C. Tariff No. 2, the rates formerly in effect. The provisions of the new schedule had the effect of increasing the flat rates heretofore charged.

IV.

On October 23, 1918, the Commission received a protest against the new schedule from the city of Bellingham and a number of consumers. On account of insufficient time in which to hold a hearing in the matter, the rates were permitted to become effective on October 25, 1918, with the proviso that the effective date of any changes if ordered by the Commission after the complaints were heard should become effective as of October 25, 1918.

Prior to the hearing the city of Bellingham requested that the petitioners' protest be amended to include complaints against the service of the respondent company, which request was granted.

V.

A statement of the Fairhaven City Water and Power Company's property and operations by years as shown by Commission's Exhibit No. 1, is as follows:

YEAR	Property Value at End of Each Year	Additions to Property During Each Year	Total Income	Total Operating Expenses and Taxes	Net Income
1890.....	\$65,000 00	.....	\$6,282 00	\$663 00	\$5,619 00
1891.....	78,415 00	\$13,415 00	16,682 00	1,830 00	14,852 00
1892.....	86,212 00	7,797 00	12,218 00	2,963 00	9,235 00
1893.....	108,228 00	22,016 00	11,340 00	3,814 00	7,526 00
1894.....	109,275 00	1,047 00	9,584 00	2,448 00	7,136 00
1895.....	109,366 00	91 00	9,136 00	2,383 00	8,753 00
1896.....	109,943 00	577 00	8,961 00	2,776 00	6,185 00
1897.....	110,017 00	74 00	8,680 00	4,788 00	3,902 00
1898.....	110,425 00	408 00	8,961 00	1,890 00	7,101 00
1899.....	115,733 00	5,306 00	10,827 00	2,491 00	8,336 00
1900.....	126,046 00	10,313 00	11,887 00	2,824 00	9,063 00
1901.....	129,254 00	3,208 00	13,687 00	3,579 00	10,118 00
1902.....	135,119 00	5,865 00	15,403 00	4,075 00	11,328 00
1903.....	141,456 00	6,337 00	16,227 00	4,384 00	11,843 00
1904.....	147,614 00	6,158 00	15,967 00	4,486 00	11,471 00
1905.....	155,410 00	7,796 00	16,976 00	5,506 00	11,470 00
1906.....	158,962 00	3,542 00	16,801 00	5,469 00	11,333 00
1907.....	162,546 00	3,594 00	17,060 00	6,124 00	11,536 00
1908.....	169,649 00	7,103 00	19,148 00	8,868 00	10,280 00
1909.....	172,725 00	3,076 00	19,587 00	6,442 00	13,145 00
1910.....	173,849 00	1,124 00	17,894 00	6,723 00	11,171 00
1911.....	175,627 00	1,778 00	18,384 00	6,637 00	11,747 00
1912.....	177,022 00	1,395 00	19,287 00	7,200 00	12,087 00
1913.....	179,191 00	2,169 00	18,821 00	7,369 00	11,452 00
1914.....	180,685 00	1,444 00	18,725 00	8,336 00	10,389 00
1915.....	183,971 00	3,336 00	19,197 00	8,541 00	10,656 00
1916.....	187,021 00	3,050 00	18,988 00	9,236 00	9,752 00
1917.....	190,192 00	3,171 00	20,905 00	12,226 00	8,679 00
1918 (8 months).....	191,424 00	1,232 00	15,210 00	9,023 00	6,187 00

YEAR	Rate Per Cent Earned Without Depreciation	3% Per Cent Depreciation	Net Income Less Depreciation	Rate Per Cent Including Depreciation	Number of Consumers
1890.....	8.61	\$2,275 00	\$3,344 00	5.11	200
1891.....	18.94	2,744 52	12,107 48	15.44	350
1892.....	10.71	3,017 42	6,217 58	7.21	348
1893.....	6.96	3,787 98	3,738 02	3.45	340
1894.....	6.53	3,824 62	3,311 38	3.03	296
1895.....	8.00	3,827 81	4,925 19	4.50	295
1896.....	5.62	3,848 00	2,337 00	2.12	294
1897.....	3.55	3,850 59	51 41	.05	357
1898.....	6.43	3,864 87	3,236 13	2.93	421
1899.....	7.20	4,050 65	4,285 35	3.70	484
1900.....	7.12	4,411 61	4,651 39	3.62	547
1901.....	7.83	4,523 89	5,594 11	4.33	630
1902.....	8.38	4,729 16	6,508 84	4.88	715
1903.....	8.37	4,950 96	6,892 04	4.87	835
1904.....	7.76	5,166 49	6,304 51	4.26	815
1905.....	7.38	5,439 35	6,030 65	3.88	746
1906.....	7.09	5,563 32	5,769 68	3.59	773
1907.....	7.09	5,689 11	5,846 89	3.59	818
1908.....	6.07	5,937 71	4,342 29	2.57	882
1909.....	7.61	6,045 37	7,069 63	4.11	890
1910.....	6.42	6,084 71	5,086 29	2.92	860
1911.....	6.69	6,146 94	5,600 06	3.19	880
1912.....	6.82	6,195 77	5,891 23	3.31	892
1913.....	6.39	6,271 68	5,180 32	2.89	943
1914.....	5.75	6,322 22	4,066 78	2.25	967
1915.....	5.79	6,438 98	4,217 02	2.29	975
1916.....	5.21	6,545 73	3,266 27	1.71	979
1917.....	4.56	6,656 72	2,022 28	1.06	993
1918 (8 months).....	2.93	4,466 56	1,720 44	.60	980

VI.

That the respondent company has, after allowing 3½ per cent depreciation, made the following rates of return on its \$191,424.00 investment in physical units of property employed in the public service:

1914	2.29%
1915	2.29%
1916	1.97%
1917	1.05%
1918 (8 months).....	.63%

VII.

In view of the facts shown in this case, the Commission is of the opinion and concludes that the new schedule of rates filed and now in effect is not unreasonable.

Order.

It Is Therefore Ordered, That the rates as shown in the W. P. S. C. No. 3 be, and the same are, hereby established as the rates to be charged by the respondent company for unmetered service.

Considerable testimony was received at the hearing relative to the lack of water pressure in the higher elevations, particularly on and in the vicinity of Fourteenth to Eighteenth streets and King, Douglas and Ferry streets, which seemed to merit the Commission's attention.

It Is Therefore Further Ordered, That the respondent company file with this Commission within thirty days of the date hereof specifications or plans for the improvement of the system, which will remedy the service complained of.

Witness, The Public Service Commission of Washington this 19th day of December, 1918.

Nos. 4717 and 4748.

Patrons of the Riverton Water Company, Complainants, v. Riverton Water Company, Respondent.

Complaints regarding water service and rates were combined for investigation.

Hearing held at Riverton October 18, 1918. The Commission entered the following Findings and Order:

I.

Riverton is an unincorporated town located in King county, State of Washington.

II.

The Riverton Water Company is a corporation operating a water system for hire in the town of Riverton, State of Washington.

III.

The history of the water system dates back to the year 1908. At that time it consisted of a few services and was owned by Messrs. Robbins, Nichols and Morrison, who transferred it to the Riverton Water Company, which was incorporated October 18, 1910, with a capital stock of fifteen hundred dol-

lars. The company's stock issue, to the amount of fifteen hundred dollars, was sold, and this amount was at once used for extensions and improvements.

IV.

Water Supply.

The source of water supply consists of three sets of springs. The water from these springs is collected in boxes and conveyed through small wooden pipes and troughs to a two-inch and three-inch wooden pipe which empties into an open tank of wooden construction, ten feet by seventeen feet by five feet, having a storage capacity of 6,375 gallons. The pipe from this tank consists of 100 feet of three-inch, then reducing to two-inch, of which there is about 3,000 feet; and the water supply for the higher elevations of Riverton is secured from said tank, and has approximately twenty-five consumers connected therewith. The supply for the lower elevations of Riverton is from a set of seven springs, delivering about 27,000 gallons every twenty-four hours. This water is collected in a concrete box and thence conveyed through a two-inch wooden pipe to a circular concrete tank having a capacity of 17,000 gallons, with a purification plant in connection. The water from this tank is conveyed to the lower elevation of Riverton through a three-inch wooden pipe of unknown length, but supplying about forty patrons. There are no maps or records of the distribution system available. It is known, however, that the distribution system supplying the higher and lower elevations are separate and independent except for a small one-inch galvanized pipe leading from the two-inch main to the concrete tank. The storage capacity for the water system is 23,475 gallons, and the total available supply about 80,000 gallons per twenty-four hours, or 1,230 gallons per service. As the system now exists, the springs flowing 54,185 gallons supply 25 services, and those flowing 27,000 gallons supply 40 services.

V.

The amount invested in the property, as shown by the property account of the company, is as follows:

	1911	1912	
Lands used in operation of property.....	.....	.....
Buildings, fixtures and grounds.....	\$250 00	.....
Water supply equipment.....	200 00	.....
Storage, transmission and distribution system.....	1,850 00	.....
Services, hydrants and meters.....	.....	.....
Miscellaneous equipment .....	.....	.....
Total	\$2,300 00	.....
Cumulative total	\$2,300 00	\$2,300 00	
	1913	1914	1915
Lands used in operation of property.....	.....	.....	.....
Buildings, fixtures and grounds.....	.....	.....	.....
Water supply equipment.....	.....	.....	\$70 71
Storage, transmission and distribution system.....	.....	.....	72 25
Services, hydrants and meters.....	.....	.....	.....
Miscellaneous equipment .....	.....	.....	8 10
Total .....	.....	.....	\$150 56
Cumulative total	\$2,300 00	\$2,300 00	\$2,450 56

	1916	1917	7 Months 1918
Lands used in operation of property.....		\$1,650 55	
Buildings, fixtures and grounds.....	\$30 88	62 30	
Water supply equipment.....			
Storage, transmission and distribution system.	7 49	751 48	
Services, hydrants and meters.....	10 40		
Miscellaneous equipment	8 80		
Total	\$57 57	\$2,464 33	
Cumulative total	\$2,508 13	\$4,972 46	\$4,972 46

VI.

The estimated cost of reproduction as found by the Commission's engineer, Mr. William B. Short, is as follows:

Headworks Springs		\$32 00
		\$32 00
Transmission Mains:		
500' 3" Wooden pipe.....	\$0.30	\$150 00
400' 2" Wooden pipe.....	.25	100 00
600' "V" trough, 900' b. m. at \$30.00.....		27 00
		\$277 00
Reservoirs:		
1 Wooden tank 10' x 17' x 5'.....		\$107 00
1 Concrete tank		252 00
		\$359 00
Purification Plant:		
Plant complete		\$47 00
		\$47 00
Distribution Mains:		
5,000' 3" Wooden pipe.....	\$0.30	\$1,500 00
3,500' 2" Wooden pipe.....	.25	875 00
		\$2,375 00
Valves and Fittings:		
2 3" Gate valves.....	\$11 00	\$22 00
3 2" Gate valves.....	8 00	24 00
1 1½" Gate valve.....	5 00	5 00
2 2" Tees	3 00	6 00
1 3" Bend	3 00	3 00
2 2" Bends	3 00	6 00
		\$66 00
Services:		
65 ½" Galv. services.....	\$7 80	\$507 00
		\$3,663 00
Lands for reservoirs, paid in stock.....	\$1,000 00	\$1,000 00
Lands for reservoirs, paid in money.....	200 00	200 00
		\$1,200 00
Overhead, 7%		339 00
(Quantities approximate)		\$5,188 00

VII.

The earnings and expenses of the company from the year 1911 to August 1, 1918, inclusive, are as follows:

	1911	1912	1913	1914
Earnings	\$406 35	\$404 19	\$411 42	\$465 00
Expenses (including taxes).....	75 35	234 57	196 63	169 38
Net earnings	\$331 00	\$169 62	\$214 79	\$295 62
Depreciation 4%	92 00	92 00	92 00	92 00
Amount earned	\$239 00	\$77 62	\$122 79	\$203 62
Average plant value.....	\$2,300 00	\$2,300 00	\$2,300 00	\$2,300 00
Per cent. earned.....	10.40%	3.37%	5.34%	8.98%
Dividends paid	\$471 10	\$238 26	\$216 85	\$295 62

	1915	1916	1917	First 7 Mos. 1918
Earnings	\$478 54	\$515 50	\$721 00	\$434 00
Expenses (including taxes).....	257 68	643 50	643 53	608 34
Net earnings	\$220 86	* \$128 00	\$77 47	* \$174 34
Depreciation 4%	95 00	99 84	149 60	87 28
Amount earned	\$125 86	* \$227 84	* \$72 13	* \$261 62
Average plant value.....	\$2,375 00	\$2,496 00	\$3,740 00	\$3,740 00
Per cent. earned.....	5.30%	9.13%	* 1.93%	* 10.77%
Dividends paid	\$220 86	.....	.....	.....

	Total
Earnings	\$3,836 00
Expenses (including taxes).....	2,828 98
Net earnings	\$1,007 02
Depreciation 4%	799 72
Amount earned	\$207 30
Average plant value.....	\$2,694 00
Per cent. earned.....	7.68%
Dividends paid	\$1,442 69

VIII.

That the average net earnings on the average plant cost for the seven years and seven months, after allowing a fair per cent for depreciation, is approximately one per cent per annum.

IX.

That the pipes leading from the springs to the tanks leak badly and some of the pipes in the distribution system are badly in need of repair.

X.

That there is a purification plant located in connection with an old reservoir and said purification plant is not now being used.

XI.

That the books and records of the company are not kept in accordance with the classification of accounts for Class C water companies, as prescribed by the Commission.

XII.

That some water is being furnished based on a contract rather than upon the rates contained in the tariff on file with this Commission.

XIII.

That none of the officers of the company receive any remuneration. The manager, E. G. Wulff, who devotes on an average about two hours per day to the company's affairs, receives no compensation therefor, and, taken as a whole, the water system is very economically operated.

XIV.

That on October 29, 1918, the respondent company filed with this Commission its tariff W. P. S. C. No. 2, which became effective November 29, 1918, naming a flat rate for household or domestic use of \$1.75 per month, with a discount of twenty-five cents if paid on or before the fifteenth day of the current month, to include a sprinkling privilege of one hour per day minimum, during the months of July, August and September. The tariff also includes a meter rate of \$1.25 per month, with a minimum of 500 cubic feet. That the effect of this tariff was to increase the rates theretofore charged.

XV.

That on November 20, 1918, complaint was filed with the Commission challenging the reasonableness of the above mentioned rates, and previous to the hearing held on October 18, 1918, a complaint had been filed by patrons of the water company regarding the service and the inadequacy of the water supply.

Conclusions.

It is the opinion of the Commission that the springs furnishing the water supply should be thoroughly cleaned and that the small pipe connecting the supplies of the higher and lower elevations be removed and a two-inch pipe, with valve to regulate the pressure, be installed in lieu of the smaller pipe. That a cover be placed over the wooden tank, and that the purification plant that is now at the abandoned reservoir be installed in connection with the wooden tank and put in good working condition. That all pipes leading from the springs to the tanks be repaired and the distribution system thoroughly gone over and repairs made where leaks are found to exist. Also that the records of the company be kept in accordance with the classification prescribed for Class C water companies by the Commission, and that no water should be furnished to any of the patrons except at the regular tariff rates. During the dry season of the year, particularly the months of July, August

and September, the evidence indicates that there has been a shortage of water. The Commission believes that with the connection of the two systems with the two-inch pipe, and the further development of the available supply, there will be sufficient water to supply the future needs of the community. Some of the patrons testifying at the hearing objected to the company's rules relative to sprinkling, alleging that the rule requiring all the patrons to sprinkle at a certain hour drained the tanks of the water storage, leaving no available supply for several hours thereafter. The Commission is of the opinion that the improvements suggested above will remedy this condition. However, if a shortage of water should develop the coming season, the Commission will go into the merits or demerits of the company's sprinkling rules.

In view of the necessary improvements enumerated above, and the financial condition of the company, the Commission concludes that the rates named in W. P. S. C. Tariff No. 2 are not unreasonable.

Order.

It Is Therefore Ordered, That the Riverton Water Company shall, within ten days of the service of this order, install a system of accounts in accordance with the Commission's classification of accounts for Class C water companies, and charge all patrons to whom water is furnished at the regular tariff rates; and that on or before May 1, 1919, said water company shall cause the springs furnishing the water supply for their water system to be thoroughly cleaned, and shall replace the small pipe leading from the two-inch main to the concrete tank, which said pipe connects the water supplies of the higher and lower elevations of the water system, with a two-inch pipe, furnished with a valve, for the purpose of regulating the pressure. That a cover be placed over the wooden tank, and that the purification plant now located at the abandoned reservoir be installed in connection with said wooden tank and put in good working condition. That all pipes leading from the springs to the tanks be repaired, and that the distribution system be thoroughly gone over and repairs made where leaks are found to exist.

Witness, The Public Service Commission of Washington at Olympia, Washington, this 17th day of February, 1919.

No. 4607.

Town of Republic, Complainant, v. Curlew Water Company, Respondent.

April 5, 1919, the Commission entered an order of dismissal in this cause as follows:

This matter coming on for hearing before the Commission this 5th day of April, 1919, and on March 29, 1919, the Commission having received the following letter from the city attorney of Republic:

"Replying to your favor of the 24th inst., relative to the above matter, I will say that soon after the complaint was lodged against the Curlew Mining Company by Edw. G. Harvey, mayor of the city of Republic, the plant was sold and transferred to the Republic Water Company, and they at once went to work and as soon as practicable put the plant in good working order

and expended several thousand dollars in improving the same, and at the present writing the new company has given very good satisfaction and we have had ample water privileges, and the reason that you probably did not receive an answer to your favor to Mr. Harvey under your date of December 19, 1918, was that he was not reelected in December, and he never called my attention to your letter. The complaint filed by Mr. Harvey should be withdrawn at this time, and if you desire a more formal withdrawal of the complaint if you will so advise me I will have one prepared by the present mayor and sent forward."

It appearing that no reason exists for the continuance of this case,
It Is Ordered, That the same be, and hereby is, dismissed.

No. 4840.

City of Anacortes, a Municipal Corporation, Complainant, v. Washington Power, Light and Water Company, a Corporation, Respondent.

No. 4718.

The Public Service Commission of Washington, Complainant, v. Washington Power, Light and Water Company, a Corporation, Respondent.

Related cases involving rates for water service in Anacortes.

While these causes were pending before the Commission, events happened which caused the entry of the following order of dismissal:

It appearing to the Commission that the water system of the defendant company, the Washington Power, Light and Water Company, having been acquired by the city of Anacortes, and the matters and things complained of in the above entitled actions having passed beyond the jurisdiction of the Commission,

It Is Therefore Ordered, That the above entitled causes be, and the same are, hereby dismissed.

Witness, The Public Service Commission of Washington this 24th day of June, 1919.

No. 4848.

The Public Service Commission of Washington, Complainant, v. South Prairie Water Company, Respondent.

Application for increased water rates challenged by Commission's complaint and orders of suspension. Case pending.

No. 4825.

The Public Service Commission of Washington, Complainant, v. Kelso Water Company, Respondent.

Complaint of the quality and quantity of the city water supply furnished by respondent, filed with the Commission December 17, 1917. May 29, 1919,

respondent filed with the Commission a tariff providing for increased rates. Hearing was held at Kelso, and findings and orders entered dealing with the matters of valuation, rates, repairs and improvements. The findings and order of June 30, 1919, were as follows:

I.

The Kelso Water Company is a corporation of the State of Washington engaged in furnishing water in the city of Kelso, Washington, for hire.

II.

That the Public Service Commission of Washington, on the 16th day of May, 1919, made an order fixing the 19th day of May, 1919, at the hour of 9:00 o'clock a. m., in the council chambers of the city hall, in the city of Kelso, as the time and place for a hearing by the Public Service Commission of Washington for the purpose of ascertaining the value of the Kelso Water Company's property within the State of Washington and ascertaining the matters and things provided in Chapter 117 of the Session Laws of 1911, as amended by Chapter 182 of the Session Laws of 1913.

III.

The Commission has been unable to determine the historic cost of the water plant of the respondent company. From the evidence it appears that there has been no sale of any of the stock of said company and the stock of said company does not have any market value. Neither is the Commission able to determine from the evidence that the plant, as a whole, has a market value; that said plant, while under the present management, has paid no dividends and from the records of the company, or otherwise, we are not able to determine whether or not said plant has ever earned dividends.

IV.

The present proprietor of the Kelso water plant several years ago acquired all the stock of the Kelso Water Company, and in 1914 there appears upon the books an entry stating the cost of the property purchased to be \$66,763.81. The books of the company also show additions to plant since 1914 as follows:

1915	\$640 61
1916	1,570 75
1917	113 42
1918 (9 months).....	185 55

or a grand total cost of property purchased, plus additions, of \$69,619.17. This information is of little worth to the Commission in arriving at a rate base.

V.

Through the work of the engineering and accounting departments of the Commission, the cost of reproducing the property of the respondent company, used and useful in the furnishing of water at Kelso, as of December 31, 1918, using an average of prices as of 1913, with additions to property since that year as shown by the books of the respondent company checked

and verified by the engineers and accountants of the Commission, is as follows:

Buildings, fixtures and grounds.....	\$1,081 00
Water supply equipment.....	6,179 00
Reservoir	1,160 00
Mains	26,870 00
Valves	655 00
Meters	3,996 00
Services	3,094 00
Office furniture and appliances.....	299 00
Tools and implements.....	200 00
Indirect charges	6,900 00
Stores and working capital.....	540 00
Lands used in operation.....	700 00
	<hr/>
	\$51,674 00

And non-operating property as follows:

Steam pump	\$2,155 00
	<hr/>
	\$2,155 00

VI.

That the cost of reproducing the property of the respondent company, used and useful, at Kelso in its present condition is as follows:

	Cost of Re- production	Age Years	Life Years	Annual Depreciation		Depreci- ated Condition Per Cent	Cost of Re- production Less Accrued Depreciation
				Per Cent	Dollars		
Buildings, fixtures and grounds	\$1,081 00	6	20	5.00	\$54 05	70.00	\$757 00
Water supply equipment.....	6,179 00	6	20	5.00	308 95	70.00	4,325 00
Storage reservoir	1,160 00	14	50	2.00	23 20	72.00	835 00
Mains	26,870 00	11	25	4.00	1,074 80	56.00	15,047 00
Valves	655 00	11	30	3.33	21 81	63.33	415 00
Meters	3,996 00	7	20	5.00	199 80	65.00	2,597 00
Services	3,094 00	7	20	5.00	154 70	65.00	2,011 00
Furniture and office ap- pliances	299 00	2	10	10.00	29 90	80.00	239 00
Tools and implements.....	200 00	1	5	20.00	40 00	80.00	160 00
Indirect charges	6,900 00				76 29		6,127 00
Stores and working capital	540 00						540 00
Land	700 00					100.00	700 00
Totals.....	\$51,674 00	9.84		3.84	\$1,983 50		\$33,753 00

VII.

The testimony does not reveal that any permanent improvements have been paid for out of the operating expenses, and the funded indebtedness of the company is \$40,000.00.

VIII.

The income statement under existing rates of the respondent company, by years, is as follows:

	1914	1915	1916	1917	9 Months 1918
Gross revenues	\$5,287 63	\$7,684 95	\$7,478 27	\$7,936 22	\$6,054 47
Operating expenses	2,517 42	4,387 11	5,061 77	5,674 11	4,840 88
Gross income	\$2,770 21	\$3,297 84	\$2,411 50	\$2,262 11	\$1,713 59
Deductions—					
Taxes	\$81 96	\$247 07	\$548 08	\$514 32	\$411 00
Bad debts	6 90	22			
Depreciation 3.84% (Plant cost normal prices)		1,900 19	1,942 66	1,974 99	1,485 53
Total deductions		\$2,147 48	\$2,490 69	\$2,489 31	\$1,896 53
Amount earned		\$1,150 36	\$79 19*	\$227 20*	\$182 94*
Average plant value.....		\$49,484 00	\$50,590 00	\$51,432 00	\$51,531 00
Per cent return		2.32	0.16*	0.44*	0.47*

* Indicates red figures.

IX.

The foregoing income statement shows the probable earning capacity of the respondent company under the rates now charged and the sum required to meet fixed charges and operating expenses.

X.

The population of Kelso is very much scattered and the number of consumers per mile of main is small. The indications are that the town will have a slow and steady growth, but at no time will the number of services per mile of main be large.

XI.

The expenditures already made by the respondent company and its predecessors in interest were such as were justified by the then existing conditions and such as might reasonably be expected in the immediate future; and, the money expended by such company has not been sufficient for the present needs of the company and its patrons nor for such reasonable needs as are to be expected in the immediate future.

XII.

That the fair value of the property of the respondent company used and useful in furnishing water to the city of Kelso and its inhabitants, is the sum, as of date December 31, 1918, of \$40,000.00.

Opinion.

In the absence of records from which we might determine the original cost of the property constituting the water system of the respondent company at Kelso, we do not feel that we would be justified in fixing the rate

base at the depreciated value of the property nor what is designated in the statute as the cost of reproducing the property in its present condition. It is clear by the testimony that the depreciation set up is purely theoretical. It has never been earned and, consequently, the utility or its stockholders never pocketed it. The utility has been receiving starvation rates. It is probable that by reason of lack of income the efficiency of the plant has deteriorated. This fault can not be attributed alone to the utility; it is common to it and its patrons. There is nothing to indicate that had the service been better there would have been a greater number of water users or a greater amount of water used. This plant can not be rehabilitated by establishing a rate base based upon the cost of reproducing the property in its present condition. This would be giving too much influence to depreciation as calculated by the usual tables and to make use thereof is violative of the spirit of the statute under which we are called upon to establish a fair value as a rate base. We believe there is thought worthy of consideration in an article entitled "Theoretical Depreciation" by George N. Webster of New York, wherein he states:

The method of unsound valuation against which this article is directed may be described briefly as the "cost less depreciation" method. The "cost" may be "original cost," "average cost" or "present cost." The depreciation which is deducted therefrom and which may be said to have its origin in the concept that used property is less valuable than new property, is based upon the assumption that used property becomes uniformly less valuable during the period of its alleged life expectancy, starting at one hundred per cent. value and ultimately reaching zero value. The amount to be deducted is computed by finding the ratio of the expired life to the assumed total life and by applying that ratio to the "cost"; the amount thus obtained, deducted from "cost" is supposed to represent the "present value."

The advocates of the depreciation theory would state the formula in this way: A unit of equipment costs \$10,000; it had a life expectancy when installed of thirty years; ten years have elapsed; ten years is one-third of thirty years; one-third of \$10,000 is \$3,333.33; this deducted from the "cost" leaves the "present value" of the unit of equipment as \$6,666.67.

It is not conceivable that any one could give the subject of depreciation of the kind here illustrated serious consideration without discovering its utter fallacy. That so few have raised their voices in protest against it must be attributed to the fact that few have really considered it seriously. These, who are unalterably opposed to the theory, include some economists, some members of the judiciary, a few of the public service commissions, some executives of corporations and some members of the legal, engineering and accounting fraternities. They have discovered that the question is not one of engineering, nor of accounting, but one of economics and finance and the legal protection of property rights.

Order.

Wherefore, It Is Ordered, That the rate base of the respondent's property used and useful in furnishing the city of Kelso and its inhabitants with water, as of December 31, 1918, be and the same is hereby fixed at the sum of \$40,000.00.

The findings and order of July 1, 1919, were as follows:

I.

The Kelso Water Company is a corporation of the State of Washington engaged in furnishing water in the city of Kelso, Washington, for hire.

II.

On June 30, 1919, the Public Service Commission of Washington fixed a rate base of the water plant of the respondent company in the city of Kelso, Washington, as of December 31, 1918, at \$40,000.

III.

The respondent company's income by years is as follows:

	1914	1915	1916	1917	9 Months 1918
Gross revenues	\$5,287 63	\$7,684 95	\$7,473 27	\$7,936 22	\$6,054 47
Operating expenses	2,517 42	4,387 11	5,061 77	5,674 11	4,340 88
Gross income	\$2,770 21	\$3,297 84	\$2,411 50	\$2,262 11	\$1,713 59
Deductions—					
Taxes	\$81 96	\$247 07	\$548 03	\$514 32	\$411 00
Bad debts	6 90	22			
Depreciation 3.84% (Plant cost normal prices)		1,900 19	1,942 66	1,974 99	1,485 53
Total deductions		\$2,147 48	\$2,490 69	\$2,489 31	\$1,896 53
Amount earned		\$1,150 36	\$79 19*	\$227 20*	\$182 94*
Average plant value.....		\$49,484 00	\$50,590 00	\$51,432 00	\$51,581 00
Per cent return		2.32	0.16*	0.44*	0.47*

* Indicates red figures.

IV.

The respondent's rate of income for 1917 and 1918, calculated upon the rate base of \$40,000 as fixed by the Commission, would be: 1917, .53 of 1 per cent; 1918, 1.39 per cent loss.

V.

Issued May 29, 1919, to become effective July 1, 1919, the Kelso Water Company filed its tariff No. 2, canceling its tariff No. 1, said tariffs, in comparison as to income, being as follows:

Flat Rate of Unmetered Consumption	Average Number of Consumers Per Month	Consump- tion Average Monthly	Revenue Present Rate		Revenue Proposed Rates	
			Rate	Total	Rate	Total
Minimum	Min. 232.06 flat	Min. flat	\$1 00	\$232 08	\$1 50	\$348 12
Minimum plus 1 fixture.....	5.67	flat	1 25	7 09	1 75	9 92
Minimum plus 2 fixtures.....	3.75	flat	1 50	5 62	2 00	7 50
Minimum plus 3 fixtures.....	5.83	flat	1 75	10 20	2 25	13 12
Sprinkling 50 front feet.....	3.50	flat	1 00	3 50	1 50	5 25
Sprinkling 100 front feet.....	.08	flat	2 00	16	3 00	24
Sprinkling 150 front feet.....	.25	flat	3 00	75	4 50	1 13
Private hydrants 2½-inch.....	1.17	flat	2 50	2 93	5 00	5 85
Private hydrants 2-inch.....	3.50	flat	2 00	7 00	3 00	10 50
City hydrants, 1st fifteen.....	15.00	flat	1 11	16 67	2 00	30 00
City hydrants, over fifteen.....	16.00	flat	1 25	20 00	2 25	36 00
Total monthly revenue from unmetered sources				\$306 00	.....	\$467 63

Metered Consumption	Average Number of Consumers Per Month	Consump- tion Average Monthly	Revenue Present Rate		Revenue Proposed Rates	
			Rate	Total	Rate	Total
Group 1—Minimum	179.08	Less than 400 c. f.	\$1 00	\$179 08	\$1 50	\$268 62
Group 2—400 to 1,200 cu. ft.....	61.00	636 c. f.	1 43	87 23	2 385	145 49
Group 3—1,200 to 2,600 cu. ft.....	10.58	1,711 c. f.	3 77	39 89	5 57	58 98
Group 4—2,600 to 4,000 cu. ft.....	2.08	3,215 c. f.	6 84	14 23	8 64	17 97
Group 5—4,000 to 5,000 cu. ft.....	.75	4,416 c. f.	9 12	6 84	10 92	8 19
Group 6—5,000 to 7,000 cu. ft.....	.83	5,963 c. f.	11 76	3 88	13 56	4 47
Group 7—7,000 to 10,000 cu. ft.....	.92	8,182 c. f.	15 24	14 02	17 04	15 68
Group 8—10,000 to 25,000 cu. ft....	.33	14,482 c. f.	23 35	7 71	25 15	8 30
Total monthly revenue from metered sources.....				\$352 88	.....	\$527 65
Total monthly revenue from all sources.....				658 88	.....	965 28
Total annual revenue from all sources.....				7,906 56	.....	11,943 36
Estimated increase in gross revenue.....				\$4,036 80		
Per cent. return full year 1918 business present rates				1.94%(red)		
Estimated per cent. return 1918 business proposed rates, based on cost new of plant.....				5.88%		

VI.

From a report made by H. J. Flagg, assistant engineer of the Commission, upon the condition of the respondent's water plant, in a summary he designates repairs and improvements in the following order:

"1. Construct river crossing to serve West Kelso.

2. Provide certain spare parts for the pump and overhaul the pump, putting it in good working order. Hang the suction pipe on metal carriers.

3. Install fire hydrant near, and hose connection within, the pump house. Also provide 50 feet of one-inch armored rubber hose. Lead the power wires underground into the pump house through a water-tight pipe or conduit.

4. Construct a 300,000-gallon reservoir to serve West Kelso.

5. Repair leaks in water mains more promptly.

6. Increase reservoir capacity for East Kelso.

7. Install a reserve pumping set.

8. Change location and improve intake."

It appears from the evidence that the utility is now reconstructing its delivery pipe across the Cowlitz river to serve West Kelso. A crank shaft, connecting rod, pinion and gear to the pump as standby parts of the pump should be procured at once. Within twelve months of the date of this order a suction pipe should be hung on a metal carrier. At the time of the hearing we were informed that a fire hydrant was being constructed near the pump house. A hose should be connected within the pump house so the same may be used in case of fire and within twelve months of the time of this order, the wires furnishing current to the pump should be carried through a water-tight pipe or conduit into the pump house. Within two years of the date of this order a 300,000-gallon reservoir should be constructed on the westerly side of the river to serve West Kelso. At all times the respondent company should keep its supply and distribution pipes in good repair that unnecessary leakage may not be caused by their being out

of repair, and the reservoir now in East Kelso should at all times be kept as nearly full of water as possible in order that reasonable fire protection may be maintained.

Opinion.

We deem it of the utmost importance that the respondent company should have a sufficient rate of income to meet all ordinary operating conditions, maintain the plant in a high degree of efficiency and grant a fair rate of return on the money invested that capital may be forthcoming to meet future demands occasioned by the growth in population and importance of the city of Kelso. That the utility has not in the past received a sufficient income to properly maintain its plant is apparent from the testimony taken at the hearing of this action. That it may receive a fair income and maintain its plant in a high degree of efficiency, we have concluded to permit its schedule of rates filed with this Commission, May 29, 1919, to become effective July 1, 1919.

Order.

Wherefore, It Is Ordered, That the following schedule of rates of the respondent company issued May 29, 1919, to become effective July 1, 1919, be and the same is hereby approved:

MONTHLY RATES.

Flat.

Minimum Charge per month.....	\$1 50
(including one bath and one toilet.)	
Extra toilet	25
Extra bath	25
Extra outside faucet.....	25
Motors for washing machine for—	
½-inch connection	50
¾-inch connection	75
1-inch connection	1 00

2. Stock Rate:

One cow	\$0 25
Each additional cow.....	25
One horse	25
Each additional horse.....	25

3. Building Purposes Rate:

Slacking lime per barrel.....	\$0 20
Cement per barrel.....	20
Adamantine mixture per ton.....	50
Laying brick per thousand.....	25

4. Fire Hydrants (City):

First 15 hydrants per year.....	\$360 00
Each additional hydrant per month.....	2 25
All hydrants shall be furnished and fully set and maintained by the city of Kelso.	

5. Private Fire Hydrants:

1-inch pipe per month.....	\$2 00
1½-inch pipe per month.....	3 00
2½-inch pipe per month.....	5 00

6. City Buildings:

Free water for city hall, city fountains, public
drinking places for persons and animals.
Franchise tax.

7. Sprinkling (from 5:30 to 8 a. m. or 5:30 to 8 p. m.):

First 25 front feet..... \$0 75
Each additional 25 feet..... 75

8. Steam Boilers:

Each horse power per hour per day..... \$0 05
Each time filled..... 2 00

9. Tanks (Portable):

Each time filled..... \$2 00

10. Meters:

Minimum rate \$1 50

11. For Tapping Mains:

For ordinary family service, $\frac{1}{2}$ or $\frac{3}{4}$ -inch pipe.... \$4 00

METER RATES.

(For each 100 cu. ft. (750 gallons) monthly.)

	<i>Cu. Ft.</i>	<i>Gals.</i>	<i>Rate Cents</i>
First	100	750	37 $\frac{1}{2}$
Next	100	750	37 $\frac{1}{2}$
Next	100	750	37 $\frac{1}{2}$
Next	100	750	37 $\frac{1}{2}$
Next	200	1,500	37 $\frac{1}{2}$
Next	200	1,500	37 $\frac{1}{2}$
Next	200	1,500	37 $\frac{1}{2}$
Next	200	1,500	37 $\frac{1}{2}$
Next	300	2,250	21
Next	300	2,250	21
Next	400	3,000	21
Next	400	3,000	21
Next	400	3,000	19 $\frac{1}{2}$
Next	500	3,750	19 $\frac{1}{2}$
Next	500	3,750	19 $\frac{1}{2}$
Next	500	3,750	18
Next	500	3,750	18
Next	1,000	7,500	16 $\frac{1}{2}$
Next	1,000	7,500	16 $\frac{1}{2}$
Next	1,000	7,500	15
Next	1,000	7,500	15
Next	1,000	7,500	15
Next	5,000	37,500	12
Next	5,000	37,500	12
Next	5,000	37,500	12
Next	5,000	37,500	10 $\frac{1}{2}$
Next	5,000	37,500	10 $\frac{1}{2}$
Next	10,000	75,000	9
Next	10,000	75,000	9
Next	10,000	75,000	9
Next	10,000	75,000	9
All over	80,000	.....	9

Minimum charge \$1.50 per month.

It Is Further Ordered, That the respondent provide at once and maintain as a standby, a crank shaft, connecting rod, pinion and gear to its pump; that within twelve months of the date of this order the suction pipe be hung on a metal carrier; that a hose be connected at once within the pump house for fire purposes; that within twelve months of the date of this order the wires furnishing current to the pump be carried through a water-tight pipe into the pump house; that within two years of the date of this order a 300,000-gallon capacity reservoir be constructed on the westerly side of the Cowlitz river to serve West Kelso; and that at all times the respondent company keep its distribution pipes in good repair and keep the reservoir in East Kelso as nearly full of water as possible in order that reasonable fire protection may be maintained.

No. 4801.

The Public Service Commission of Washington, Complainant, v. Orchard Water Company, Respondent.

March 3, 1919, respondent filed with the Commission a tariff providing for increased water rates in Kalama. May 29, 1919, the town of Kalama filed its objections thereto. Physical valuation of the utility was made, and a hearing on this and the matter of rates was held at Kalama, June 20, 1919. In the valuation proceedings, the Commission entered the following:

History.

The Orchard Water Company of Kalama was incorporated November 18, 1895, with a capital stock of \$7,000.00, divided into 140 shares of \$50.00 each. The original incorporators were H. Orchard, J. P. Atkin and A. H. Imus. On May 21, 1906, the capital stock was increased to \$12,000.00, divided into 240 shares at \$50.00 each. On October 1, 1911, Dr. L. M. Sims purchased the stock of other members of the company and became president. The capital stock of \$12,000.00 is all owned by Dr. Sims. The original system was installed in 1896 and 1897 and there have been but few changes since then. In 1912 the company, at the request of the town council, took up the four-inch pipe and installed six-inch pipe in streets which were about to be paved.

Description.

The water supply for the town of Kalama is derived from three sources, viz.: The Kalama river, Taxer creek and Spencer creek. The supply from the Kalama river is pumped by a Gould Triplex pump, driven by a 25 horsepower motor, through two miles of five-inch steel casing to a concrete-lined reservoir of 220,000 gallons capacity. The Taxer creek gravity supply has its source on Taxer creek at a distance of approximately two and one-half miles from the reservoir and empties into it through a four-inch bored wood pipe. This line traverses a very rough and broken country from its intake to within one-half mile of the reservoir, and is badly in need of renewing. The Spencer creek gravity line has its intake about one and one-half miles from the reservoir and delivers its supply through a three-inch bored wood pipe. This line, however, has been out of commission for six years, owing

to the logging operations of the Mountain Timber Company. Although this line is at present inoperative, it is a valuable asset to the company and will be put into operation as soon as business warrants it.

The reservoir is situated about one-half mile from the business center of town and at an elevation of slightly over 400 feet above it. The static pressure in the mains downtown is approximately 180 pounds per square inch.

The distribution system consists of mains varying in size from six-inch to one-half inch in diameter, with valves, services and meters. The excavation necessary to get the mains underground was for the greater part very difficult, due to the presence of rock and large boulders.

The supply from the gravity sources is adequate only during the wet season, or for about six months a year. During the dry season it is necessary to supply the deficiency by pumping from the Kalama river.

I.

We are unable to trace the historic cost of the plant as the original vouchers are not in existence and there are no books that we have been able to discover which throw light as to the original cost of construction. A few oldtimers were called and gave general testimony, but nothing that they related would justify us in substituting their recollections of cost for substantiated evidence such as vouchers or original book entries.

II.

Through our engineering and accounting departments such investigation has been had and work done that they have been able to set forth the cost of reproduction of the water plant furnishing the municipality and inhabitants of Kalama with water, the condensed statement of the cost of reproduction being as follows:

Buildings, fixtures and grounds.....	\$719 00
Reservoir	2,031 00
Water supply equipment.....	1,145 00
Transmission mains	11,182 00
Distribution mains	9,144 00
Valves	170 00
Hydrants	288 00
Meters	2,371 00
Services	1,765 00
Furniture and fixtures.....	25 00
Tools and implements.....	50 00
Indirect charges	4,299 00
Working capital and stores.....	1,058 00
Lands	600 00

Total cost of reproduction..... \$34,847 00

III.

Our office force has also produced a depreciation table based upon an inspection of the water plant and the application of the usual mortality tables which is as follows:

	Cost of Reproduction	Average Age Years	Average Life Years	Annual Depreciation		Depreciation Condition Per Cent.	Present Value
				Per Cent.	Dollars		
Buildings, fixtures and grounds.....	\$719 00	12	20	5.00	\$35 95	40.00	\$288 00
Reservoir	2,031 00	22	40	2.50	50 78	45.00	914 00
Water supply equipment.....	1,145 00	12	20	5.00	57 25	40.00	458 00
Transmission Mains—							
Pump line	4,200 00	12	25	4.00	168 00	52.00	2,184 00
Taxer Creek line.....	4,844 00	22	25	4.00	193 76	12.00	531 00
Spencer Creek line.....	2,138 00	22	25	4.00	85 52	12.00	257 00
Distribution Mains—							
6" Pipe	1,185 00	7	30	3.33	39 83	76.67	916 00
4" Pipe in 4th street.....	400 00	7	25	4.00	16 00	72.00	288 00
All other pipes.....	7,549 00	22	25	4.00	301 96	12.00	906 00
Valves	170 00	22	30	3.33	5 68	26.67	45 00
Hydrants	298 00	22	30	3.33	9 59	26.67	77 00
Meters	2,371 00	10	20	5.00	118 55	50.00	1,186 00
Services	1,765 00	10	25	4.00	70 00	60.00	1,069 00
Office furniture and fixtures.....	25 00	8	10	10.00	2 50	20.00	5 00
Tools and implements	50 00	2	5	20.00	10 00	60.00	30 00
Indirect charges	4,299 00				46 64		3,644 00
Stores and working capital.....	1,053 00						1,053 00
Lands	600 00						600 00
Totals.....	\$34,847 00	15.27		3.48%	\$1,212 59		\$14,496 00

The sum of \$14,496.00, in our opinion, is the cost of reproducing the water plant in its present condition.

IV.

There is evidence that subsequent to 1906 and prior to 1911 improvements and additions to property were made out of earnings, but we are unable to discover from testimony that any permanent improvements have ever been charged to operating expenses. In the beginning the company paid dividends and continued to earn dividends until 1913. Subsequent to which time it has earned no dividends.

V.

The company has no funded indebtedness.

VI.

The following is an income statement of the plant by years:

	1912	1913	1914	1915	1916	1917	1918
Operating revenues	\$4,140 20	\$5,066 35	\$4,589 45	\$4,036 05	\$3,540 35	\$4,245 55	\$4,248 99
Operating expenses	2,597 48	4,039 04	3,789 56	3,433 61	2,763 84	3,394 01	3,783 96
Gross income	\$1,542 72	\$1,027 31	\$809 89	\$602 44	\$806 51	\$851 54	\$465 03
Deductions from Gross Income—							
Taxes	\$108 07	\$142 86	\$149 96	\$117 07	\$258 81	\$214 20	\$201 18
Depreciation—3.48%	1,135 41	1,212 40	1,212 59	1,212 50	1,212 59	1,212 59	1,212 59
Total deductions	\$1,243 48	\$1,355 26	\$1,362 55	\$1,329 66	\$1,471 40	\$1,426 79	\$1,413 77
Amount earned	\$299 24	\$327 96*	\$542 69*	\$727 22*	\$664 89*	\$575 25*	\$948 74*
Average plant value (Based on cost of reproduction).....	\$32,627 00	\$34,839 00	\$34,847 00	\$34,847 00	\$34,847 00	\$34,847 00	\$34,847 00
Rate of return.....	0.86%	0.94%	1.55%*	2.08%*	1.90%*	1.65%*	2.72%*

(* Denotes red figures.)

And the foregoing statement shows the earning capacity of the water system under the rates in effect prior to May 5, 1919, and the sum required to meet fixed charges and operating expenses.

VII.

That on March 3, 1919, respondent company filed with this Commission its tariff No. 2, W. P. S. C. No. 2, cancelling tariff No. 1, W. P. S. C. No. 1, to become effective April 5, 1919. Tariff No. 2 was suspended by this Commission for thirty days and by order of the Commission on April 29, 1919, said tariff was allowed to become effective pending a hearing on the same.

VIII.

The following statement shows the revenues from respondent company's tariff No. 1 and approximate revenues from its present tariff No. 2:

OLD SCHEDULE					NEW SCHEDULE	
	Average Number of Monthly Customers for Year	Average Monthly Consumption of Group Cu. Ft.	Rate	Amount	Rate	Amount
Domestic flat rate.....	70	.....	\$1.00	\$70 00	\$1.75	\$122 50
Domestic Metered—						
0-400 cu. ft.....	113	.....	1.00	113 00	1.75	197 75
Over 400 cu. ft.....	29	29,130	\$1.00—.25	61 86	\$1.75—.40	120 87
Industrial metered	2	43,243	1.00—.08	63 02	1.60—.10	78 53
Laundries metered	1	5,250	.10	5 25	.15	7 87
Fire hydrants	29	.....	1.00	29 00	1.75	50 75
Totals.....				\$342 13		\$578 27
This schedule yielded a deficit of 2.86% on cost of reproduction.					Increase—	
					Per month,	\$236 14
					Per annum,	\$2,833 68
					This increase yields company 5.7% on cost of reproduction.	

SCHEDULE OF RATES.

OLD SCHEDULE.		NEW SCHEDULE.	
Domestic flat rate.....	at \$1.00 per customer	Domestic flat rate.....	at \$1.75 per customer
Domestic Meter Rate—		Domestic Meter Rate—	
0-400 cu. ft.....	at 1.00 per customer	0-400 cu. ft.....	at 1.75 per customer
Over 400 cu. ft.....	at .25 per M. gallons	Over 400 cu. ft.....	at .40 per 100 cu. ft.
Industrial Rate—		Industrial Rate—	
1st 3,000 gals.....	at 1.00 per customer	1st 3,000 gals.....	at 1.60 per customer
Next 50,000 gals.....	at .25 per M. gallons	Next 50,000 gals.....	at .30 per M. gallons
Next 50,000 gals.....	at .20 per M. gallons	Next 50,000 gals.....	at .25 per M. gallons
Next 25,000 gals.....	at .15 per M. gallons	Next 25,000 gals.....	at .20 per M. gallons
Next 25,000 gals.....	at .125 " M. gallons	Next 25,000 gals.....	at .15 per M. gallons
Over 155,000 gals.....	at .08 per M. gallons	Next 155,000 gals.....	at .10 per M. gallons
Laundry rate .....	.10 per 100 cu. ft.	Laundry rate .....	.15 per 100 cu. ft.
Hydrant rate	1.00 per each	Hydrant rate	1.75 per each

IX.

The population of Kalama is scattered and there is only a small number of customers per mile of main. Kalama will, however, have a steady growth, but at no time will the number of customers per mile of main be great.

X.

That the expenditures already made by the respondent company in procuring its property were such as were justified by the then existing conditions and such as might reasonably be expected in the future and the money expended by the company has been reasonable for the present needs of the company and for such needs as might reasonably be expected in the immediate future.

Opinion.

The foregoing tables of operating expenses do not quite reflect the true condition of the respondent company, for certain sums were paid out to those acting as trustees which were not justified by the law. The sums, however, so disbursed, would not change in a substantial way the net earnings and their deduction from operating expenses would not show an earning at all commensurate with the investment. It is apparent that the people of Kalama have had the use of the respondent company's plant without a sufficient rate of return to the respondent and consequently the property has depreciated from year to year and the burden of that decrease has fallen upon the shoulders of the respondent, and for us at the present time to establish as a rate base the depreciated value of \$18,376.88, would be doing an injustice to the respondent, for the patrons of the company are, as a matter of fact, receiving a service that approximates efficiency and they cannot complain if they are compelled to pay for the service which they are receiving. So far as we are aware, no Commission has held to the theory that theoretical depreciation shall be deducted from capital and an income calculated from the reduced amount. Neither do we feel justified in considering the three-inch pipe line, the use of which has been discontinued for a few years, as no longer used or useful. Under all the circumstances, we believe that a fair rate base to be the sum of \$20,500.00.

Order.

Wherefore, It Is Hereby Ordered, That the rate base of the respondent water plant be, and the same is hereby fixed as of date, December 30, 1918, at the sum of \$20,500.00.

Witness, The Public Service Commission of Washington this 8th day of July, 1919.

The Commission entered the following dealing with the matter of rates:

Findings of Fact.**I.**

The Orchard Water Company is a corporation furnishing water, for hire, to the municipality of Kalama and its inhabitants.

II.

July 8, 1919, the Public Service Commission of Washington fixed a rate base for the property of the respondent company used and useful in furnishing water as above mentioned, as of December 31, 1918, at the sum of \$20,500.00.

III.

March 3, 1919, the respondent filed with this Commission its tariff No. 2, W. P. S. C. cancelling its tariff No. 1, W. P. S. C. to become effective April 5, 1919. On the 18th day of March, 1919, the Public Service Commission of Washington suspended the operation of said tariff No. 2 for the period of thirty days in order that the Commission might investigate and inform itself as to the merits of the proposed rates; and, the Commission having made such investigation but not sufficient time would have elapsed for hearing between the time of such investigation and the effective date of said tariff No. 2 as suspended, and, it appearing to the Commission from such investigation that the respondent company was failing to make a return on its property used and useful in the furnishing of water to the municipality of Kalama, it was ordered that pending the hearing on tariff No. 2, the respondent company be allowed to charge rates in accordance with said tariff No. 2 from and after May 5, 1919.

IV.

INCOME STATEMENT OF RESPONDENT COMPANY BY YEARS.

	1912	1913	1914	1915	1916	1917	1918
Operating revenues	\$4,140 20	\$5,066 35	\$4,559 45	\$4,086 05	\$3,540 35	\$4,245 55	\$4,248 99
Operating expenses	2,597 43	4,039 04	3,769 56	3,433 61	2,733 54	3,394 01	3,733 96
Gross income	\$1,542 72	\$1,027 31	\$819 89	\$652 44	\$806 51	\$851 54	\$465 03
Deductions from Gross Income—							
Taxes	\$108 07	\$142 86	\$149 96	\$117 07	\$253 51	\$214 20	\$201 18
Depreciation—3.48%	1,185 41	1,212 40	1,212 59	1,212 59	1,212 59	1,213 59	1,213 59
Total deductions	\$1,243 43	\$1,355 26	\$1,382 55	\$1,329 66	\$1,471 40	\$1,426 79	\$1,413 77
Amount earned	\$299 24	\$327 95*	\$542 66*	\$727 22*	\$664 89*	\$576 25*	\$948 74*
Average plant value (Based on cost of reproduction)	\$32,627 00	\$34,839 00	\$34,847 00	\$34,847 00	\$34,847 00	\$34,847 00	\$34,847 00
Rate of return (Based on cost of reproduction)	0.89%	0.94%*	1.55%*	2.08%*	1.90%*	1.65%*	2.72%*
Rate of return (Based on rate base)							4.58%*

(* Denotes red figures.)

V.

Approximate revenues from respondent's tariff No. 1 and tariff No. 2, without discount, are as follows:

PRESENT SCHEDULE					PROPOSED SCHEDULE	
	Average Number of Monthly Customers for Year	Average Monthly Consumption of Group Cu. Ft.	Rate	Amount	Rate	Amount
Domestic flat rate.....	70	.....	\$1.00	\$70 00	\$1.75	\$122 50
Domestic Metered—						
0-400 cu. ft.....	118	.....	1.00	118 00	1.75	197 75
Over 400 cu. ft.....	29	29,130	\$1.00—.25	61 86	\$1.75—.40	120 87
Industrial metered	2	48,243	1.00—.08	68 02	1.60—.10	77 53
Laundries metered	1	5,250	.10	5 25	.15	7 87
Fire hydrants	29	.....	1.00	29 00	1.75	50 75
Totals.....				\$342 13		\$577 27

VI.

The domestic flat, domestic metered and industrial metered rates under tariff No. 2 are subject to 5 per cent discount for prompt payment, which, if taken full advantage of, would reduce the revenue under tariff No. 2 from \$578.27 to \$551.33. Should said tariff No. 2 yield a revenue of \$551.33 a month, the increase over the old schedule would be \$209.20, or an annual increase of \$2,510.40, taking from the latter sum the losses occasioned by the rates under tariff No. 1, or \$948.74, leaves a balance of \$1,561.66, which would yield a return upon the rate base fixed by the Commission of 7.63 per cent. This rate cannot be criticised, but we believe that a fair schedule would be as follows:

Domestic flat rate.....	\$1 75
Domestic metered rate, 0-400 cu. ft.....	1 60
Domestic metered rate, over 400 cu. ft.....	1 60—.35
Industrial metered rate.....	1 50—.10
(These rates subject to a 5% discount for prompt payment.)	
Laundries, per 100 cu. ft.....	15
Fire hydrants, each per month.....	3 00

The prognosticated revenues from such a schedule would be as follows:

Domestic flat rate.....	\$116 38
Domestic metered rate, 0-400 cu. ft.....	171 76
Domestic metered rate, over 400 cu. ft.....	102 36
Industrial metered rate.....	61 59
Laundries	7 87
Fire hydrants	87 00
Total.....	\$546 96

—an increase per month over the old schedule of \$204.83 or, per annum, of \$2,457.96. Deducting from this the losses under schedule No. 1, \$948.74, would leave a balance of \$1,509.22, or a rate of return of 7.37 per cent on the rate base as found by the Commission.

We cannot accede to the hydrant rental of \$1.75 per month. Such low rental has been generally condemned by commissions. However, there have

been instances where commissions have increased the hydrant rental and municipalities have refused to make use of the hydrants. This has resulted in commissions making further orders, casting the burdens which should be borne by fire hydrants upon other consumers.

In our calculations we have eliminated the sums paid by the respondent company to certain stockholders for acting as trustees.

We have deemed it advisable to establish a sprinkling rate for lawns and gardens. From this source we are satisfied the company will gain no profit as the irrigation season is during the pumping season of the respondent's plant. We believe that a sprinkling rate for lawns and gardens, to be effective from June 1st to September 30th, at a rate of two and one-half cents ($2\frac{1}{2}$ c) per month per 100 square feet of surface, with a minimum of 50 cents per month, the connection to be around the meter at customer's expense, would be highly beneficial in a community of the character of Kalama.

Order.

Wherefore, It Is Ordered, That the following schedule of rates be, and the same is, hereby approved by the Commission:

Domestic flat rate.....	at \$1.75	per customer
Domestic meter rate, 0-400 cu. ft.....	at 1.60	per customer
Domestic meter rate, over 400 cu. ft.....	at .35	per 100 cu. ft.
Industrial rate—First 3,000 gals.....	at 1.50	per customer
Next 50,000 gals.....	at .30	per M. gallons
Next 50,000 gals.....	at .25	per M. gallons
Next 25,000 gals.....	at .20	per M. gallons
Next 25,000 gals.....	at .15	per M. gallons
Over 156,000 gals.....	at .10	per M. gallons
Laundry rate .....	.15	per 100 cu. ft.
Hydrant rate	3.00	per each
Sprinkling rate, in effect June 1 to Sept. 30.	.025	per 100 sq. ft.
Minimum .....	.50	per month
Connections around meter at customer's expense.		

Schedule to be effective from respondent's next billing date.

Witness, The Public Service Commission of Washington this 18th day of July, 1919.

No. 4765.

W. H. Murphy, et al., Plaintiffs, v. Mount View Water Company, Defendant.

The plaintiffs are residents along the Lake Burien car line, immediately south of Seattle, Washington. Their petition set forth a proposed increase in the water rates charged by defendant. The cause was disposed of by the Commission's order of August 5, 1919, as follows:

This matter coming on for hearing before the Commission on the 5th day of August, 1919, and it appearing that the complainant has constructed a service of his own, and that the cause of complaint no longer exists,

It Is Ordered, That this case be, and the same is, hereby dismissed.

ORDERS IN CASES AFFECTING TRANSPORTATION BY WATER.

No. 4787.

The Public Service Commission of Washington, ex rel. Citizens of Seaton, et al., Complainants, v. T. B. Seaton, Respondent.

December 17, 1918, there was filed with the Commission a complaint that respondent was charging for passage on his ferry, rates in excess of his published tariff. Investigation was made, and a hearing held at Seaton, Washington, April 3, 1919. The following findings and order were entered:

I.

The respondent, T. B. Seaton, owns and operates a ferry for hire on the Columbia river at Seaton, Lincoln county, Washington, and said ferry is generally known as Seaton's ferry.

II.

Seaton's ferry is located on the highway leading from Wilbur in Lincoln county to the Nespelem country in Okanogan and Ferry counties north of the Columbia river.

III.

The town of Wilbur is the nearest and most accessible point to a railroad for settlers in the Nespelem country. An auto stage makes daily trips between the towns of Wilbur and Nespelem when the road is passable, and there is considerable other travel across this ferry when the roads are in condition. During the late fall and winter months the travel is very light as compared with other seasons of the year. About seventy-five per cent (75%) of all the traffic over the ferry is by automobile.

IV.

The ferry is of cable type constructed about the year 1893 and has an auxiliary cable spanning the river near the main cable. During high winds the end of the boat is connected with this cable to make the service safer.

V.

There is being constructed a highway from the junction of Grand Coulee and Columbia river to the towns of Almira and Coulee City, and a ferry has been installed in connection with this road a distance of approximately four (4) miles from Seaton's ferry. The distance from Coulee City and Almira to the Nespelem country is 55 miles and 38 miles, respectively. The distance from Wilbur to the Nespelem country over the Seaton ferry road is approximately 42 miles. When the new highway is completed in the Coulee, travelers going to and from Wilbur and Nespelem can use this route. The Seaton's ferry route is, however, the most direct route to Wilbur and the city of Spokane. A few miles to the north of Seaton's ferry is located what is known as the Barry ferry.

VI.

Seaton's ferry was operated for several years by its owner, Mr. Seaton, who acted as ferryman and performed all the labor connected with its opera-

tion. About September, 1913, he changed his residence to Wilbur, having in the meantime made an arrangement with Mr. Dumas, who resides on a homestead at the north landing of the ferry, to operate the system for fifty per cent (50%) of the receipts. Mr. Dumas continued under this arrangement until November 26, 1918. About December, 1918, Mr. Seaton attempted to keep the ferry in operation by having a man named Marchant, as ferryman, at a wage of \$3.00 per day. This arrangement lasted only a short time as the revenues of the ferry for December and January were not sufficient to pay the wages and the service rendered under this arrangement was not satisfactory to the public. About February 1, 1919, Mr. Seaton made an arrangement with W. M. Palm to operate the system for fifty per cent (50%) of the receipts and at the time of this hearing the ferry was being operated under this plan.

VII.

The main cable is 1900 feet long, 1¼ inch steel wire. The auxiliary cable is of the same length of ½ inch steel wire. The cables are attached to towers which are anchored to "dead men" buried to a depth of 12 feet. The boat is of the ordinary type for river ferries. Its dimensions are as follows: Top, 52 feet long; bottom, 50 feet long; width, 13 feet; built of 2x6 and 5x6 fir lumber. Mr. Seaton testified that it would cost approximately \$1,776.00 to replace the cables and approximately \$800.00 to replace the boat. The respondent read into the record a quotation from the M. E. Hay Company, showing that the larger cable at present prices would cost \$1400. The Commission's chief engineer, Mr. McCurrach, has checked this price and finds it to be approximately correct. The cable in place, however, was purchased in the year 1893 as second-hand cable. It was admitted by the respondent that the ferry was offered for sale at one time for \$1500. From the evidence in this case and the information the Commission has of ferry properties comparing favorably with Seaton's ferry, the Commission will assume for the purpose of this proceeding that the fair value of the Seaton ferry for rate-making purposes is \$2,000.00.

VIII.

Operating Revenues.

No accurate record has been at all times kept of the receipts and expenditures. Mr. Dumas produced some account books used during the period he operated the system and from said books the following account of revenues was ascertained:

1913.	
September 18th to 30th, inc.....	\$109 50
October	158 05
November	63 25
December	51 35
1914.	
January	\$28 00
February	20 95
March	44 15
April	75 05
May	68 20
June	118 55
July	97 15
August	59 40

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1917.	
June	\$188 05
July	310 75
August	122 95
September	121 30
October	127 00
November	145 00
December	70 00

1918.	
January	\$55 55
February	53 56
March	80 75
April	111 90
May	143 35

The testimony of witnesses indicated that the receipts quoted above for the different months in the two years 1917 and 1918 would be about the average normal yearly revenues, the total of same being \$1,530.16.

IX.

Operating Expenses.

Allowing as a fair compensation for a ferryman \$1,200.00 per annum; five per cent (5%) depreciation on ferry system, \$100.00 per annum; maintenance, repairs, etc., \$75.00; total, \$1,375.00—would leave a net income of \$155.00, which is approximately eight per cent (8%) return on the value of \$2,000.00.

X.

Rates.

The rates now being charged are as follows:

Automobiles, each way.....	\$1 00
Trucks, each way.....	1 00
Two-horse teams, each way.....	1 00
Four-horse teams, each way.....	1 25
One-horse rig, each way.....	50
Horse and rider, each way.....	50
Footman, each way.....	25
Cattle and horses.....	10 each

The above rates are higher than rates generally charged by other river ferries comparing favorably with the Seaton ferry as to investment, operating revenues and expenses and traffic, due principally to the fact that other ferries have provided in their tariffs for round-trip rates which are somewhat lower than the sum of the two one-way fares.

The testimony indicates that future traffic over Seaton's ferry will increase over that of 1917 and 1918, due to the anticipated greater development of the Indian reservation lands opened for settlement a few years ago.

XI.

The Commission is of the opinion, and so finds, that the present rates are too high to permit the owner to hold the present traffic and participate in new traffic, and should be modified to the extent of providing a round-trip rate of \$1.50 for automobiles, trucks, two-horse teams and four-horse teams.

While the complaint in this case was primarily as to the unreasonableness of the rates, it developed during the hearing that there was dissatisfaction as to the condition of the approaches and landings to the ferry. It is the duty of the owner of the ferry to keep the approaches and landings in good order and repair, and the Commission finds that the approaches and landing places at Seaton's ferry are not in as good condition as they should be. Loose stones have been allowed to accumulate in the driveway and the approaches onto the aprons of the boat are too abrupt.

Order.

Wherefore, It Is Ordered, That the respondent, T. B. Seaton, file with this Commission and post on his ferry boat the following rates:

Automobiles, one way.....	\$1 00
Automobiles, round trip.....	1 50
Trucks, one way.....	1 00
Trucks, round trip.....	1 50
Two-horse teams, one way.....	1 00
Two-horse teams, round trip.....	1 50
Four-horse teams, one way.....	1 25
Four-horse teams, round trip.....	1 50
One-horse rig, one way.....	50
Horse and rider, each way.....	50
Footman, each way.....	25
Cattle and horses.....	10 each

Same to become effective May 15, 1919.

It Is Further Ordered, That the respondent, T. B. Seaton, improve the approaches and landings of his ferry by keeping the loose stones out of the driveway and improve the approaches onto the aprons of the boat.

Witness, The Public Service Commission of Washington, this 6th day of May, 1919.

Note.—The rate of \$1.50 for a round trip of a four-horse team shown in the foregoing order, was an error, and was subsequently changed to \$1.75 by supplemental order.

No. 4744.

A. W. Engle, et al., Complainants, v. Washington Route, Inc., Respondent.

The complaint, filed with the Commission November 16, 1918, alleged failure of the respondent to serve complainant and the public according to its published schedule. Disposition was as follows:

This matter coming on for hearing before the Commission this 7th day of July, 1919, and due to lack of prosecution, and the Commission being requested by complainants to treat the same as being withdrawn without prejudice,

It Is Therefore Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 7th day of July, 1919.

No. 4884.

The Public Service Commission of Washington, ex rel. Bremerton Chamber of Commerce, Complainants, v. Washington Route, Inc., Respondent.

August 11, 1919, respondent issued tariffs raising existing passenger and freight rates, and August 30, 1919, Bremerton Chamber of Commerce filed its protest thereto. Disposition was as follows:

This cause coming on regularly to be heard at Bremerton, Washington, the 15th day of September, 1919, and it appearing to the Commission that the protest or complaint had in effect been withdrawn, and it being stipulated between the representatives of the Washington Route, and representatives of the complainant that the same order might be entered in this cause as will be entered in cause No. 4883, relating to the Navy Yard Route, and the Commission having by its order this day permitted the proposed rates of the Navy Yard Route to become effective, and there appearing no necessity for the continuance of the proceedings in this cause,

It Is Hereby Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 23rd day of September, 1919.

No. 4889.

The Public Service Commission of Washington, ex rel. Lummi Island Civic Improvement Club, et al., Complainants, v. Lummi Navigation Company, Respondent.

On its own motion, the Commission, as of June 12, 1919, filed complaint alleging the unreasonableness of increased rates published by respondent. Investigation was made and hearing held at Lummi, Washington, June 27, 1919, and the following entered:

Findings of Fact.

I.

The Lummi Navigation Company is a corporation organized and existing under the laws of the State of Washington, and is engaged in operating steamboats for hire on the waters of Puget Sound and its tributaries.

II.

That under date of March 6, 1919, the respondent issued its supplement No. 1 to tariff No. 3, W. P. S. C. No. 3, to become effective April 10, 1919, said supplement cancelling former passenger rates.

III.

That on the 12th day of June, 1919, the Public Service Commission of Washington challenged the rates contained in supplement No. 1, to tariff No. 3, W. P. S. C. No. 3, as being unreasonable, unjust, unfair and excessive. This challenge was on the relation of patrons of respondent's boats.

IV.

The Commission has caused an examination to be made of the property of the respondent company, its income and operating expenses, by years, which shows as follows:

LUMMI NAVIGATION COMPANY.

Income Statement from Annual Reports, Income Tax Reports and Office Records.

	1909	1910	1911	1912	1913	1914	1915
Freight revenues					\$1,518 60	\$1,745 40	\$2,283 06
Miscellaneous							
Passenger revenues						1,090 10	2,941 02
Total revenues	\$3,091 81	\$3,881 25	\$3,709 42	\$3,369 06	\$6,522 00	\$2,835 50	\$5,224 08
Total expenses and taxes	3,801 35	3,534 91	3,436 66	2,204 67	3,651 00	3,142 62	3,543 09
Gross income	\$709 54*	\$346 34	\$372 76	\$1,164 39	\$2,871 00	\$307 13*	\$1,675 99
Depreciation, 4%	400 00	400 00	400 00	400 00	400 00	400 00	400 00
Amount earned	\$1,109 54*	\$53 69*	\$27 24*	\$764 39	\$2,471 00	\$707 13*	\$1,275 99
Plant investment	\$10,000 00	\$10,000 00	\$10,000 00	\$10,000 00	\$10,000 00	\$10,000 00	\$10,000 00
Per cent earned	11.09%*	.53%*	.27%*	7.64%	24.71%	7.07%*	12.75%*
Number of trips during year					494	570	549

* Denotes loss or red figures.

LUMMI NAVIGATION COMPANY.

Income Statement from Annual Reports, Income Tax Reports and Office Records.—Concluded.

	1916	1917	1918	1919 To May 31st	Estimated 1919	Totals 1900-1918
Freight revenues						
Miscellaneous	\$2,164 71	\$3,470 02	\$4,117 32	\$2,468 32	\$3,250 00	\$15,290 11
Passenger revenues	1,565 00	5,374 89	4,130 30	1,637 60	6,042 00	20,854 51
Total revenues	\$3,729 71	\$8,844 91	\$8,247 62	\$4,105 92	\$9,292 00	\$50,518 19
Total expenses and taxes	4,292 70	7,635 23	8,911 56	8,865 03	9,230 00	44,138 79
Gross income	\$562 89*	\$1,765 36	\$236 79*	\$240 89	\$12 00	\$6,379 40
Depreciation, 4%	400 00	500 00	532 03	564 70	532 03	4,532 03
Amount earned	\$962 89*	\$965 36	\$1,068 82	\$123 81*	\$620 03*	\$1,847 37
Plant investment	\$10,000 00	\$20,000 00	\$20,800 75	.....	\$20,800 75	\$12,060 00
Per cent. earned	9.62%*	4.82%	5.13%*	1.81%*	3.94%*	1.28%
Number of trips during year	540	594	583	.....	.....	521

* Denotes loss or red figures.

LUMMI NAVIGATION COMPANY.
Expense Statement from Annual Reports, Income Tax Reports and Office Records.

	1909	1910	1911	1912	1913	1914	1915
Captain's salaries							
Engineer's salaries				\$1,519.74	\$700.00	\$630.00	\$900.00
Deckhands				P. R.			
Cooks					600.00	560.00	750.00
All other employees					233.57	233.35	250.00
General expenses	\$3,646.76	\$3,340.85	\$3,236.69	Exp. 516.48			
				M. & R.			
Amount paid for charter							
Stores and supplies					425.50	721.33	
Fuel					795.00	605.50	600.00
Repairs					491.76		720.80
Dockage privileges					60.00	35.00	60.00
All other expenses	154.59	194.06	189.97	108.45	295.15	141.77	176.61
Taxes				5%	40.00	165.67	90.68
Total all expenses and taxes	\$3,801.35	\$3,534.91	\$3,426.66	\$2,204.67	\$3,690.98	\$3,142.62	\$3,543.09

LUMMI NAVIGATION COMPANY.

Expense Statement from Annual Reports, Income Tax Reports and Office Records.—Concluded.

	1916	1917	1918	1919	Estimated 1919	Totals 1909-1918
Captain's salaries	\$900 00	\$1,298 15	\$1,500 00			\$7,435 89
Engineer's salaries	800 00	1,214 35	1,260 00			5,184 35
Cooks .....	.....	860 00	940 00			1,900 00
Deckhands .....	.....	678 00	457 28			2,292 15
All other employees	250 00	127 75	.....			127 75
General expenses	186 48	467 28	.....			11,394 49
Amount paid for charter .....	.....	130 00	200 00			330 00
Stores and supplies .....	.....	878 87	1,754 43			3,842 73
Fuel	62 50	1,948 68	1,020 13			6,265 84
Repairs	1,495 53	294 56	1,624 10			3,489 18
Portage privileges	447 86	.....	133 00			3,443 00
All other expenses	60 00	543 84	.....			1,805 79
Taxes	181 85	67 74	92 67			547 62
Total all expenses and taxes	\$4,418 28	\$7,864 67	\$8,911 56	\$3,865 03		\$44,563 79

We are satisfied that the foregoing table reflects the respondent's revenues and expenses, and we are also of the opinion that the plant investment is at least \$20,000.00.

V.

Much has been said in the testimony about respondent carrying freight for the Carlisle Packing Company, in which corporation some of the stockholders of the Lummi Navigation Company have an interest. So far as we are advised all services performed by the Lummi Navigation Company for the Carlisle Packing Company have been at tariff rates.

VI.

The rates under the aforesaid supplement became effective April 10, 1919, and are not necessarily reflected in the foregoing statement, but as near as we are able to prognosticate, under these rates the respondent will not be able to earn any rate of return upon its investment. It may be that the increased rates will result in fewer persons seeking transportation by respondent's boat. This matter can be the subject of future determination. Under the circumstances we do not feel ourselves warranted in disturbing respondent's rates under supplement No. 1 to tariff No. 3.

Wherefore, It Is Ordered, That the protest against respondent's rates under supplement No. 1 to tariff No. 3, W. P. S. C. No. 3, be, and the same is, hereby denied.

Witness, The Public Service Commission of Washington, this 7th day of August, 1919.

No. 4872.

The Public Service Commission of Washington, Complainant, v. McPherson Bros. Company, a Corporation, Respondent.

Respondent owns and operates a ferry on the Columbia river near Brewster, Washington. The complaint alleged that respondent had for some time past, "failed to furnish, maintain and provide safe, adequate and sufficient service facilities and equipment to enable it to promptly, expeditiously, safely and properly receive, transport and deliver all persons or property offered to or received by it for transportation;" also, that its rates for the transportation of passengers and property were excessive and unreasonable for the service rendered. The matter of rates on this ferry is still pending, and is being dealt with in another cause, numbered 4906. The complaint involving service was disposed of by the Commission as follows:

Findings of Fact.

I.

That the respondent is a corporation and is a common carrier engaged in the transportation of persons and property by ferry boat between points in the State of Washington for hire, and owns, maintains and operates a ferry across the Columbia river between Douglas and Okanogan counties at a point about one-half mile from the town of Brewster, Washington.

II.

That said ferry is the natural and only point of crossing the Columbia river by which the people of the town of Bridgeport can reach the Great Northern Railroad at Brewster, their nearest point of railroad transportation; that there are several thousand acres of wheat and fruit land which lie in the vicinity of said ferry on the Douglas county side of the Columbia river, the residents of which are nearer to railroad transportation by way of said ferry than by any other route; that the operation of said ferry is a commercial necessity to the people of the town of Bridgeport, the town of Brewster, the residents and owners of said wheat and fruit land and the public in general using the highway across the river at that point.

III.

That the respondent has two ferry boats, one being a cable ferry operated by the force of the current of the Columbia river, and the other being a ferry boat operated and driven by a gasoline engine, the engine in this boat being a six-cylinder Winton automobile engine; that said power boat is capable of giving safe and adequate service under its own power.

IV.

That, although the respondent has owned the power ferry for practically eighteen months, the same has not been operated with the exception of a few weeks during that time.

V.

That the demands of traffic are such that the cable ferry cannot at all times adequately care for that traffic, especially during the wheat and fruit shipping seasons of the year.

VI.

That both the power and the cable ferry can be operated efficiently and safely by the building of an additional approach on either side of the river to accommodate the power ferry, and this can be done at a reasonable cost to the respondent company.

VII.

That the service heretofore rendered by the respondent company has not been safe, adequate nor efficient.

VIII.

The Commission also finds that the respondent company has not kept its records and accounts in the manner required by law and the rules of the Commission.

From the foregoing findings of fact, the Commission makes the following

Order.

It Is Ordered, That the respondent company place and maintain the power ferry boat in complete readiness for operation for standby service; that suitable landings and approaches be provided so that the power ferry boat can be efficiently and safely operated at all times in conjunction with the cable ferry and at the same time; that both the power ferry boat and the cable ferry boat be operated whenever there are more patrons in waiting for service at any time on any day than one of said boats can accommodate;

that both boats and safe and sufficient approaches be in readiness for efficient service within fifteen (15) days from the 4th day of September, 1919.

It Is Further Ordered, That the respondent company keep its books, records and accounts according to the official classification to be furnished it by the Commission.

Witness, The Public Service Commission of Washington, this 4th day of September, 1919.

There having been a failure of the respondent to comply in all respects with the foregoing order, the Commission on September 29, 1919, brought the matter to the attention of the Attorney General with the request that an action be brought to compel compliance and for the recovery of the penalty provided in such cases by statute. This action is now pending.

No. 4885.

The Public Service Commission of Washington, ex rel. Citizens of Sandy Beach, Complainants, v. Puget Sound Navigation Company, Respondent.

The complaint set forth an alleged increase in rates. After investigation and conference, the cause was disposed of as follows:

This matter coming on for hearing before the Commission at its regular meeting and it appearing that the respondent having filed its supplement No. 1 to tariff No. 6, to become effective September 10, 1919, which supplement will have the effect of reducing the proposed fares contained in tariff No. 6 in so far as the same pertains to Sandy Beach, and it further appearing to the Commission that complainants have withdrawn their complaint, being satisfied with the fares contained in supplement No. 1 to tariff No. 6.

Now, Therefore It Is Ordered, That suspension order dated September 5, 1919, is hereby rescinded, and this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 16th day of September, 1919.

No. 4888.

The Public Service Commission of Washington ex rel. Chamber of Commerce, Bremerton, Complainants, v. Navy Yard Route, Respondent.

The complaint challenged as unreasonable a proposed increase in freight and passenger rates. An investigation was made and a hearing held at Bremerton, Wash., September 15, 1919. The Commission entered the following Findings and Order:

In this cause the Navy Yard Route filed with the Commission its passenger tariff No. 3 and freight tariff No. 6, proposing certain increases in its existing boat rates between the cities of Seattle and Bremerton, Washington, as shown in its passenger tariff No. 3 and freight tariff No. 6.

Complaint having been made to the Commission by certain merchants of the city of Bremerton and the Bremerton Chamber of Commerce, the Commission caused an examination to be made by its traffic expert and ac-

counting department of books and records of the respondent company, the results of which examination are shown in Commission's exhibits Nos. 1 and 2. Testimony of the Commission's traffic expert and of witnesses representing the various parties above named was heard and from all of the evidence, the Commission makes the following findings of fact:

I.

That the Navy Yard Route is a corporation engaged in furnishing transportation between the cities of Seattle and Bremerton, Washington, for hire.

II.

That on the 11th day of August, 1919, the respondent company filed with the Commission its passenger tariff No. 3 and freight tariff No. 6, proposing increases in its passenger fares and freight rates between the cities of Seattle and Bremerton, Washington. The increases proposed in passenger fares were as follows:

The round trip passenger fare was increased from fifty cents to sixty-five cents.

The half fare round trip was increased from twenty-five to thirty-five cents.

The one way half fare was increased from fifteen cents to twenty cents.

The green commutation book, containing twenty-seven rides was increased from \$5.00 to \$6.50.

Owing to the large number of items covered by the increased freight tariff, it is impracticable to set out the increases in detail herein. They do, however, show an average increase of approximately 20 per cent over the rates formerly in effect.

III.

Under the proposed increased passenger and freight rates there will be returned to the company annually, additional gross revenues from their passenger business in the sum of \$85,210.72, and from their freight business approximately \$6,000.00, provided, an equal number of passengers and an equal amount of freight are carried in the same proportion as during the six months' period ending June 30, 1919.

That the total gross receipts of respondent company for the six months' period ending June 30, 1919, was \$230,817.13; that the total operating expenses, including taxes, was \$242,170.33, leaving a deficit in the sum of \$11,353.20 for that six months' period; that there should also be included in the deficit the sum of \$4,562.06, earnings from express properly creditable to the earnings for the year 1918, which was paid to the Navy Yard Route during the first six months of 1919, making an annual deficit for the year 1919 in the sum of \$27,268.46, based upon a continuation of traffic indicated by the six months' period referred to.

IV.

That there will be effective September 15, 1919, an increase in wages, chargeable to operating expenses, which will exceed \$24,000.00 per year for certain employees; that effective September 15, 1919, there will be increases in the wages of other employees, the exact amount of which cannot at this time be ascertained but it will be a substantial increase and amount.

V.

The total passenger revenues for the six months' period from January to June, 1919, was \$176,355.23, and the total freight revenue for that period was \$35,687.33; that the remainder of the operating receipts consisted of sums received for privileges on the boats, meals, mail, newspapers, express and miscellaneous receipts, including excursions, charters and railway tickets amounting to the total sum of \$14,212.51, the principal item of which consisted of \$4,800.00 for mail, and the miscellaneous receipts of \$3,762.64.

VI.

That on January 1, 1917, the Public Service Commission of Washington valued the steamers *Tourist*, *Aloha*, *Kitsap II*, and *Kennedy*, in the sum of \$329,025.82, and the miscellaneous office fixtures, etc., at \$481.50; that the steamer *Bailey Gatzert* has not been valued by the Commission, but that the actual cost of the *Bailey Gatzert* amounts to \$73,125.00, which for the purpose of this proceeding the Commission deems fair as a rate base; that the depreciation on the property since the valuation was made is figured at \$69,375, being two and one-half years at 5 per cent per annum for the wooden vessels and 2½ per cent per annum for the steel vessels, and this would leave the total valuation as a rate basis of \$333,257.32 for the five vessels, upon which the company is entitled to earn a fair return.

VII.

That the increases in wages and the increased cost of repairs and material will make the net earnings of the company approximately \$25,000.00 per year, or less than 8 per cent on the capital invested by the company.

VIII.

That as shown by the following table of the number of passengers carried in the months of January, February, March, April, May, June, July and August of 1918, as compared with 1919, there has been a decided falling off in the number of passengers carried during the last three months of that period in 1919, as compared with the same period in 1918; that the months of June, July and August are months in which the company should have its heaviest patronage, and should this falling off continue, there will be a further decrease in the revenues of the company without a corresponding decrease in operating expenses:

	1919	1918
January	143,439	114,699
February	122,762	101,297
March	142,792	110,129
April	122,004	108,533
May	123,676	115,396
June	125,703	138,178
July	134,692	163,347
August	149,181	168,352
Totals.....	1,064,249	1,019,352

The Commission is not unaware that there may be a resumption of heavier traffic due to the stationing of the Pacific fleet at Bremerton, and the opening of the Navy Yard for the inspection of tourists, and should the traffic develop such that the revenues would be materially increased, the Commission reserves the right to order a reduction in the rates.

IX.

That the respondent operates five steamboats on its run between Seattle and Bremerton, i. e., the Aloha, Kennedy, Kitsap II, Tourist, and Bailey Gatzert, and that the schedule of these steamers is satisfactory to the patrons of the respondent.

X.

That at the present time the company makes no provision for reduced rates for students attending school; that there should be established such a commutation ticket and that it should not exceed 12½ cents per ride or 25 cents for the round trip for students actually attending school; that the use of such tickets may be restricted so as to prevent abuse of their use; and that such tickets may be limited in use to a period of sixty days.

From the foregoing findings of fact, the Commission concludes that the increased rates and fares should become effective.

Therefore, It Is Ordered, That the rates and fares enumerated in passenger tariff No. 3 and freight tariff No. 6 of the Navy Yard Route be, and the same are, hereby permitted to become effective September 23, 1919.

It Is Further Ordered, That the respondent company put into effect and issue as of that date school tickets as shown in paragraph IX of the foregoing findings of fact, and that a tariff be filed with the Commission, covering such school tickets.

It Is Further Ordered, That the respondent company file with this Commission not later than the 10th day of each calendar month a statement showing the total number of passengers carried, segregated as between classes or character of tickets, and that the company also file with the Commission at the same time a monthly statement showing the amount of wage increases paid and a monthly statement showing the number of barrels of fuel oil used and the price paid therefor;

It Is Further Ordered, That in the findings and order where the word Bremerton is used, it is to include, Bremerton, Charleston, Port Orchard and the Navy Yard.

Witness, The Public Service Commission of Washington, this 23rd day of September, 1919.

No. 4882.

The Public Service Commission of Washington ex rel. County Commissioners of Ferry County, et al., Complainants, v. Ben C. Camp, Respondent.

The commissioners of Ferry county complained informally to the Commission of the service furnished by respondent, and protested his proposed increase of rates for ferriage. After an investigation, the Commission held a hearing at Sherman Grange hall, Ferry county, October 11, 1919, and entered the following

Findings of Fact.

I.

That Ben C. Camp owns and operates a ferry across the Columbia river between Stevens and Ferry counties, at or near the town of Kettle Falls, Washington.

II.

That the respondent filed with the Commission his tariff No. 1, proposing certain increases in charges for ferriage.

III.

That respondent has failed to keep his accounts in accordance with the official classification of records and accounts provided by the Interstate Commerce Commission and the Public Service Commission of Washington, so that the Commission is unable to determine from the records kept whether the respondent is entitled to an increase in rates or not.

IV.

That the respondent has failed to maintain and keep in proper repair his ferry boat and appurtenances.

V.

That the formal complaint in this case does not challenge the sufficiency or safety of the service rendered by the respondent, but the Commission in making its findings and order will, from the testimony adduced at the hearing, consider the complaint amended so as to cover both rates and service, and testimony as to service and the defective condition of the boat having been received without objection.

From the foregoing findings the Commission makes the following

Order.

I.

That the respondent hereafter keep his records and accounts in accordance with the classification prescribed by the Public Service Commission of Washington.

II.

That the respondent on or before December 1, 1919, replace the railings on the side of the boat and the flooring of the boat with new lumber, and that the same be done in a good and workmanlike manner and of substantial material.

III.

That the respondent within the time mentioned replace the control wheels and brakes with new and modern and substantial control wheels and brakes, and that there be placed on each end of the boat and fastened to the hull, not to the flooring, proper belay brackets for tying the boat to the shore; and that the respondent further repair or renew any part of said ferry boat that is in an unsafe condition, including the necessary caulking of the hull; that good and substantial chains be placed across either end of said ferry boat at all times when necessary to protect the traveling public and to insure the safety of automobiles, vehicles, passengers and stock; and that the respondent by proper and sufficient repairs, place the towers supporting the ferry cable in a safe and efficient condition.

IV.

That the respondent, by proper repairs or replacements, or otherwise, place his entire ferry property in a condition that it may be operated with safety and efficiency at all times.

V.

That the respondent shall not be required to operate his ferry boat during the noon hour, from 12 to 1 o'clock p. m., nor during the hours of darkness, except in cases of emergency.

VI.

That respondent operate under the following rates:

	<i>One Way</i>	<i>Round Trip</i>
1. Two-horse team and wagon, empty or loaded.	\$0 50	\$0 75
2. Four-horse team and wagon, empty or loaded.	1 00	1 50
3. Single or double team or buggy.....	50	75
4. Extra passenger other than driver in vehicle.	10	.....
5. Saddle horse and rider.....	25	.....
6. Pack horse, with or without load.....	25	.....
7. Mules, horses, and cattle (fifteen head or less)	15	.....
8. All above fifteen head, mules, horses and cattle	10	.....
9. Hogs or sheep.....	05	.....
10. Automobile, 5-passenger or less.....	75	.....
11. Automobile, 7-passenger or more.....	1 00	.....
12. Motorcycles	25	.....
13. Foot passengers	15	.....
14. Auto trucks, one-ton, with driver.....	75	1 25
15. Auto trucks, two-ton, with driver.....	75	1 50
16. Auto trucks, three-ton, with driver.....	1 00	1 50
17. Bicycle and rider.....	25	.....
18. Automobile trailers	25	.....
19. Baggage, grips, merchandise, 50 to 100 lbs. when carried by passengers.....	10	.....
20. Baggage, grips, merchandise, 100 to 500 lbs. when carried by passengers.....	25	.....
21. Service between dark and daylight 50% in addition to all regular rates.		
22. Minimum charge per trip.....	50	.....

—until such time as the Commission shall be properly advised that he is entitled to a different compensation, such information to be derived from a study of properly kept books and accounts, itemized according to the classification required by the Public Service Commission.

VII.

That the respondent file with the Public Service Commission at once a tariff setting forth all rates or charges to be collected for old or new items of service, as set out in paragraph VI, including those items enumerated in schedule or rates provided by Ferry county in its license or franchise and any services performed by the respondent not covered by that schedule.

Witness, The Public Service Commission of Washington, at Olympia, Washington, this 4th day of November, 1919.

No. 4723.

Ray Brouillet, Complainant, v. Liberty Bay Transportation Company,
Respondent.

The complainant brought to the attention of the Commission the discontinuance of steamboat service to Indianola Beach. An investigation was

made, and the Commission conducted a hearing at Seattle, October 25, 1918. Findings and order were entered as follows:

The subject at issue in this case is boat transportation to and from Indianola Beach. Indianola Beach was started in April, 1916. It is still a small community incapable of supporting a postoffice. During the summer quite a few families live there and furnish a considerable number of passengers to boats. In the winter time the settlement is insignificant insofar as transportation is concerned.

When this place started, its proprietors ran a gasoline boat to and from the community to Seattle. Later they used the boat as a ferry between Indianola and Suquamish, at the latter place connecting with the boats landing there and plying between Seattle and Liberty Bay points. Later on the Kitsap County Transportation Company, the owner of several boats principally plying between Seattle and Liberty Bay communities, served Indianola Beach. This service, not being satisfactory, was supplemented by a gasoline boat service between Indianola Beach and Suquamish.

In the spring or early summer of 1918 the people of Indianola desiring better service, applied to the officers of the Liberty Bay Transportation Company, which company owned a few steamers. These steamers were used on routes between Seattle and Liberty Bay points mainly. Just what took place in the negotiations between the representative of the people of Indianola Beach and the officers of the Liberty Bay Transportation Company, which company is a common carrier in the State of Washington, is somewhat in doubt, but we conclude from the testimony that it was, in substance, as follows:

The Liberty Bay Transportation Company was building a dock at Suquamish just outside the entrance to Liberty bay. At this point they were to deliver mail under a contract which they were about to enter into with the federal government. Landing at this point would bring their boats a little closer to Indianola Beach than if they were to come out of the entrance of Liberty bay and sail direct to Seattle.

With some reluctance, the officers of the Liberty Bay Transportation Company undertook to serve the inhabitants of Indianola Beach. They established a good service and in so doing ran their mail boats to that point.

The people at Indianola Beach prevailed upon the government to establish a postoffice at that point, but, for want of business, said office failed.

The running of the boats of the Liberty Bay Transportation Company to Indianola Beach brought forth criticism from the people of the Liberty Bay communities, who claimed that the stop at Indianola Beach consumed twenty minutes' additional time. It is claimed by the officers of the Liberty Bay Transportation Company that they only agreed to try out rendering service to Indianola Beach and if the same proved unprofitable, they were to cease. It is clear from the evidence that when the boats of the Liberty Bay Transportation Company began landing at Indianola that the Kitsap County Transportation Company ceased operating their boat except on Saturday. Finding the business unsatisfactory at Indianola Beach and in response to the protest of their Liberty Bay patrons, on or about the 8th of September, 1918, the Liberty Bay Transportation Company ceased serving Indianola.

The "Athlon" is the principal boat of the Liberty Bay Transportation Company, its home port being Poulsbo. It has a speed of fourteen miles an

hour. It leaves Poulsbo at 6:30 o'clock in the morning, stopping at the following places in the order named: Scheurman, Scandia, Pearson, Lemolo, Virginia, Keyport, Seabold, Suquamish and Seattle; on the return trip making the same landings in the reverse order, its running time from Poulsbo to Seattle being about two hours and fifteen minutes. The number of passengers range from thirty to one hundred persons per trip. It makes two round trips a day between Poulsbo and Seattle, with an extra service on Saturday.

The Liberty Bay Transportation Company has a mail contract with the federal government which calls for the carrying of mail by it out of Seattle to the points touched and mails of these points to Seattle. Under this mail contract the transportation company carries the mail for Rolling Bay and Port Madison. This mail is put off the boat at Seabold and carried by auto twice a day. At Pearson there is a rural carrier whose schedule is arranged to conform with the boat schedule. At Poulsbo there are two rural carriers and three star routes, one to Kingston, one to Gamble and one to the Hoods Canal country. The one to Hoods Canal is carried by auto to Vinland and from that point on the service is by gasoline boats. The auto on the Gamble route must leave at 5:15 o'clock in the morning in order to make the 6:30 boat at Poulsbo.

We have been petitioned in this case to enter an order directing the Liberty Bay Transportation Company to restore service at Indianola Beach so that the boat leaving Poulsbo at 6:30 in the morning shall call at Indianola Beach on its way to Seattle and the boat leaving Seattle in the evening shall call at the Beach.

Opinion.

If the question were one solely between the Liberty Bay Transportation Company upon the one hand and the people of Indianola Beach upon the other, we would have no hesitation whatever in ordering the re-establishment of a proper service, but if we re-establish the service we will inconvenience a large number of people in order to convenience a small number; in fact, will inconvenience not only the people of the Liberty Bay district but those living along Hoods Canal and, to a certain extent, interfere with the trade relations between several communities and the city of Seattle.

The people of Indianola Beach, not being satisfied with the service furnished them by the Kitsap County Transportation Company, solicited the Liberty Bay Transportation Company to serve them and when the company undertook this service the people threw their whole business to the latter company, which resulted in the practical withdrawal of the Kitsap County Transportation Company's boats from Indianola Beach.

In the absence of a certificate of necessity by some regulatory body, steamboating upon the Puget Sound is a precarious business. No sooner does a boat upon some run show a profit than an adventurer appears; the thoughtless or prejudiced welcome him and the result is two boats are placed on the run to divide a business being fairly well done by one. Even boat companies are invited by slightly interested ones to invade the field occupied by others. Steamboat men, moved more by vengeance and revenge than by business sense, invade each other's field of activity and demoralize each other's business. Communities fairly well served are not content to leave

well enough alone but will make promises of much traffic in order to induce a new and competing line of communication to come to them. All this is done in spite of the fact that there is a regulatory commission in the state, which is at all times open to receive complaints against service. This commission has already applied to steamboating upon Puget Sound the doctrine of socialization of rates, but we can make no progress under it unless the people of each community depending upon boat service will cooperate and be fair to those serving them.

Under the circumstances, we have concluded to direct the Liberty Bay Transportation Company to re-establish service as follows: The Saturday evening boat to land at Indianola Beach on its way to Liberty Bay and the Monday morning boat leaving Poulsbo at 6:30 o'clock to land at Indianola Beach on its way to Seattle.

Order.

Wherefore, It Is Ordered, That the Liberty Bay Transportation Company is hereby directed to land its boat as follows: The Saturday evening boat to land at Indianola Beach on its way to Liberty Bay and the Monday morning boat leaving Poulsbo at 6:30 o'clock to land at Indianola Beach on its way to Seattle.

Witness, The Public Service Commission of Washington, this 17th day of December, 1918.

This cause was carried by respondent on writ of review to the superior court of Thurston county, and the judgment of the Commission sustained.

ORDERS IN CASES INVOLVING TELEPHONE COMPANIES.

No. 4747.

(Consolidated cases.)

The Public Service Commission of Washington, the City of Seattle, the City of Tacoma, the City of Yakima, and the City of Ritzville, et al., Complainants, v. The Pacific Telephone and Telegraph Company and Albert S. Burleson, Postmaster General of the United States, as Director of Telegraph and Telephone Systems, Respondents.

The Public Service Commission of Washington, and the City of Spokane, Complainants, v. The Home Telephone and Telegraph Company of Spokane and Albert S. Burleson, Postmaster General of the United States, as Director of Telegraph and Telephone Systems, Respondents.

November 6, 1918, certain proposed tariffs of respondent companies were filed with the Commission. Protests were subsequently filed by the cities of Seattle, Spokane, Tacoma, Yakima and Ritzville. Following the interchange of telegrams between the postmaster general and the Commission, the proceedings culminated in two hearings, the first of which was held at Olympia, January 15, 1919. Findings and order were as follows:

I.

The Pacific Telephone & Telegraph Company is a corporation owning an extensive telephone and telegraph system in the states of Washington, Oregon and California, with minor operations in Idaho and Nevada; and, as such corporation, on and prior to the 31st day of July, 1918, was operating such telephone and telegraph system for hire in said states.

II.

Resolution of Congress.

July 16, 1918, the senate and house of representatives of the United States of America, by joint resolution, authorized the president of the United States to take possession, control and operate all telephone and telegraph lines in the United States.

III.

President Assumes Control.

July 31, 1918, the president of the United States, under and by virtue of the joint resolution mentioned in the preceding paragraph, did assume possession and control and did undertake the operation of all the telephone and telegraph lines in the United States.

IV.

Proposed Tariffs Filed.

November 6, 1918, the Pacific Telephone & Telegraph Company, with the approval of the postmaster general, filed with this Commission certain tariffs numbered W. P. S. C. No. 2 bearing the notation "Effective Novem-

ber 15, 1918, unless and until otherwise ordered by the postmaster general of the United States, or otherwise, according to law," which tariffs, if effective, would generally increase the exchange rates of the Pacific Telephone & Telegraph Company in the State of Washington.

V.

Protests Against Tariffs.

Immediately following the filing of said W. P. S. C. No. 2 various protests were entered against the proposed increase in rates, and telegrams and letters relative thereto were exchanged between the postmaster general and the Public Service Commission of Washington.

VI.

Instructions From Postmaster General.

November 27, 1918, the Public Service Commission of Washington received from the postmaster general a telegram, stating among other things as follows:

"Replying to your telegram twenty-sixth apparently sent before you received my telegram of same date please strike out from rate schedule filed on November sixth the date November fifteenth and substitute December sixth as the effective date. Please proceed to hear complaints in accordance with your regular procedure and dispose of the matter in the regular way * * *."

VII.

Challenge to Jurisdiction.

Practically at the opening of the hearing in this cause the assistant corporation counsel of Seattle, speaking on behalf of the city of Seattle and other cities, asserted: "We want to present right here our challenge to the jurisdiction of this body (The Public Service Commission of Washington) to sit in any capacity."

VIII.

Contract of Government With Bell System.

October 4, 1918, the American Telephone & Telegraph Company, in behalf of itself and each constituent company of the Bell System thereafter joining therein, made a proposal offering to accept the just compensation named in such proposal for the supervision, possession, control and operation of the Bell System taken by the president of the United States at 12 o'clock midnight on July 31, 1918; said proposal being accepted October 5, 1918, by the postmaster general by order No. 2085.

October 14, 1918, the Pacific Telephone & Telegraph Company, in writing, indicated to the postmaster general its purpose to join in and that it did join in said proposal.

December 6, 1918, in furtherance of said proposal, an understanding was entered into between the American Telephone & Telegraph Company, under and by virtue of which, the Pacific Telephone & Telegraph Company was to receive from the general compensation awarded the Bell System an annual amount of \$4,233,233.00 subject to corrections for errors in com-

putations. Said amount is, however, subject to change to meet future conditions although not in a substantial manner. The contract between the postmaster general and the Bell System and the agreement between the Bell System and the Pacific Telephone & Telegraph Company provides for an annual depreciation of 5.72 per cent as applied to the book value of the property. The compensation to the Bell System as set out in section 7 of the contract between it and the postmaster general is as follows:

"Section 7. (a) The Postmaster General shall pay to the American Company for each year, and pro rata for each fractional part of a year during the period of Federal control, an amount equal to the sum of the following four items: Item (1) the annual interest and existing amortization charges on all outstanding securities or obligations of the Bell System in the hands of the public, including \$48,367,200.00 of the American Company's Seven Year Six Per Cent. Convertible Gold Bonds, dated August 1, 1918, due August 1, 1925, item (2) dividends for the period of one year upon the share capital of the Bell System outstanding July 31, 1918, in the hands of the public, at the average rate of regular dividends paid thereon during the three years ending December 31, 1917, which items (1) and (2) aggregate Sixty-five Million One Hundred Forty-eight Thousand Six Hundred and Forty-one Dollars (\$65,148,641), subject to corrections for errors in computations, if any, item (3) the annual charge for interest and dividends and other costs of securing necessary additional capital for such expenditures as may be made at the request of the Postmaster General, and item (4) the annual charge for such interest and dividends as the Bell System may be required to pay on new securities or share capital issued for the discharge, conversion or renewal of present obligations, including sinking fund obligations, and for additional interest and charges to secure extensions on existing securities.

"(b) The said compensation shall be paid to the American Company in monthly installments on the last day of each calendar month during the period of Federal control, except that installments which have accrued prior to the acceptance of this proposal shall be payable at the date of such acceptance; such payments to the American Company to operate to fully satisfy and discharge all claims of the Constituent Companies and each of them on account of the amounts so paid.

"If any Constituent Company shall fail to join in this proposal, as provided by Section 12 hereof, the following deductions shall be made from the above mentioned items (1) and (2).

"(1) There shall be deducted an amount equal to the annual interest and existing amortization charges, on all outstanding securities or obligations of such non-joining Constituent Company; and

"(2) There shall be deducted an amount equal to dividends for the period of one (1) year, at the average rate paid during the three (3) years ending December 31, 1917, upon the share capital of such non-joining Constituent Company outstanding on July 31, 1918."

IX.

Four and One-Half Per Cent Contract.

Between the Bell System and its constituent companies there has, for many years, existed what is known as the four and one-half per cent (4½%) contract. This contract is recognized and made a part of the agreement between the Bell System and the constituent companies joining and the postmaster general.

X.

The book value of the plant of the Pacific Telephone and Telegraph Company system as of December 31, 1917, is as follows:

	<i>Real Estate</i>	<i>Plant</i>	<i>Total</i>
Washington (including home office, Spokane)	\$1,652,415	\$17,551,367	\$19,203,782
Oregon	1,505,729	9,516,167	10,566,896
Idaho .....	.....	341,187	341,187
Nevada	559	825,458	826,017
California	4,958,537	60,019,003	64,977,540
Totals.....	\$7,662,240	\$88,253,182	\$95,915,422

XI.

The average plant value as found by the Commission for the State of Washington, as of December 31, 1914, excluding the Home Telephone Company of Spokane, with net additions by years to property, as shown by books of company, is as follows:

1915	\$15,966,705 00
1916	15,935,245 00
1917	15,986,493 00
1918, 9 months.....	16,402,449 00

XII.

The average exchange plant value as found by the Commission, apportioned to communities, December 31, 1914, with net additions by years to property as shown by the books of the company is as follows:

	<i>1915</i>	<i>1916</i>	<i>1917</i>	<i>9 Months 1918</i>
Aberdeen	\$235,947 00	\$241,360 00	\$252,243 00	\$263,859 00
Almira	2,296 00	2,816 00	3,865 00	4,828 00
Anacortes	46,406 00	.....	.....	.....
Arlington	43,147 00	.....	.....	.....
Auburn	21,946 00	22,513 00	23,378 00	24,005 00
Bellingham	599,233 00	594,978 00	594,895 00	601,450 00
Battleground .....	.....	1,137 00	2,393 00	2,519 00
Bothell	11,997 00	.....	.....	.....
Bremerton	30,901 00	61,916 00	64,409 00	71,308 00
Buckley	7,163 00	7,150 00	7,313 00	7,504 00
Burlington	30,519 00	.....	.....	.....
Centralia	72,169 00	73,241 00	75,589 00	77,382 00
Camp Lewis .....	.....	.....	11,468 00	35,577 00
Chehalis .....	.....	26,703 00	54,330 00	55,424 00
Cle Elum	12,427 00	13,164 00	14,519 00	15,632 00
Colfax	52,356 00	54,822 00	55,859 00	55,667 00
Colville	18,139 00	18,324 00	18,980 00	19,411 00
Coulee City	2,526 00	2,936 00	3,617 00	4,057 00
Coupeville	7,325 00	.....	.....	.....
Dayton	36,336 00	36,817 00	37,282 00	37,749 00
Deer Park	6,332 00	6,685 00	7,449 00	8,113 00
Edison	2,721 00	.....	.....	.....
Edwall	1,661 00	1,820 00	1,977 00	1,990 00
Enumclaw	8,017 00	8,826 00	9,301 00	9,455 00
Ephrata	4,720 00	4,847 00	5,113 00	5,483 00
Everett	299,985 00	.....	.....	.....
Harrington	7,467 00	8,606 00	9,593 00	10,044 00
Hartline	781 00	965 00	1,168 00	1,205 00
Hoquiam	78,850 00	81,052 00	84,145 00	87,275 00

	1915	1916	1917	9 Months 1918
Hatton		317 00	636 00	637 00
Issaquah	4,326 00	4,702 00	5,366 00	5,815 00
Kent	12,511 00	25,126 00	25,899 00	26,745 00
Lind	4,902 00	5,058 00	5,206 00	5,303 00
Monroe	34,388 00			
Mount Vernon	45,704 00			
Marcus			1,891 00	3,942 00
Medina			2,938 00	6,029 00
Newport	4,807 00	9,277 00	8,858 00	8,751 00
Northport	3,432 00	5,208 00	7,070 00	7,428 00
North Yakima	293,863 00	300,985 00	310,428 00	319,987 00
Oak Harbor	4,805 00			
Odessa	5,274 00	5,896 00	6,676 00	7,098 00
Okanogan	3,292 00	7,076 00	7,956 00	8,927 00
Olympia	113,132 00	123,658 00	135,490 00	141,417 00
Oroville		5,096 00	11,213 00	12,258 00
Palouse	14,898 00	14,795 00	14,803 00	14,855 00
Pasco		11,960 00	25,494 00	27,362 00
Pateros	2,611 00	3,014 00	3,239 00	3,480 00
Pomeroy	29,669 00	30,156 00	30,887 00	31,596 00
Port Blakeley	9,178 00	18,605 00	18,882 00	19,085 00
Port Madison	1,828 00	3,615 00	3,690 00	3,861 00
Port Orchard	12,379 00	24,841 00	25,322 00	26,049 00
Raymond	10,275 00	21,354 00	23,244 00	25,136 00
Renton	12,986 00	25,921 00	26,255 00	26,591 00
Ritzville	23,984 00	25,439 00	28,054 00	28,906 00
Roy	1,743 00	1,865 00	1,978 00	1,942 00
Riverside		629 00	1,398 00	1,552 00
Seattle	6,632,435 00	6,639,161 00	6,743,412 00	6,894,142 00
Sedro Woolley	39,387 00			
Shelton	6,877 00	7,213 00	7,545 00	7,679 00
Silverdale	4,687 00	9,430 00	9,569 00	9,694 00
Snohomish	33,861 00			
South Bend	8,059 00	15,954 00	16,027 00	16,517 00
Sprague	11,677 00	11,799 00	12,010 00	12,194 00
Sultan	4,433 00			
Stanwood	17,558 00			
Sumner	11,686 00	14,900 00	16,193 00	16,438 00
Tacoma	2,382,133 00	2,393,933 00	2,450,466 00	2,512,672 00
Vancouver	138,453 00	140,054 00	146,134 00	157,576 00
Vashon		2,971 00		
Waitsburg	11,891 00	12,082 00	12,190 00	12,427 00
Walla Walla	313,275 00	327,514 00	343,342 00	356,075 00
Wilbur	9,868 00	9,993 00	10,688 00	11,461 00
Wilson Creek	2,049 00	2,114 00	2,161 00	2,122 00
Yacolt		2,419 00	5,673 00	6,011 00
Miscellaneous Exchanges	166,452 00	167,835 00	167,829 00	175,242 00

XIII.

The annual net earnings for the State of Washington by years, with taxes and depreciation at 5.72 per cent, based upon average plant value, are as follows:

	Using Exchange and 30% Toll Revenue	Using Exchange and Total Toll Revenue
1915	\$77,502 98*	\$380,407 69
1916	43,098 77	614,121 37
1917	49,531 15*	627,858 27
1918 (9 months).....	136,994 55*	454,012 58

* Indicates red figures.

XIV.

The annual net earnings by communities in the State of Washington, by years, using exchange and 30 per cent toll revenue, with taxes and depreciation at 5.72 per cent, based upon the average plant value, are as follows:

	1915	1916	1917	9 Months 1918
Aberdeen	\$200 17*	\$3,593 19	\$7,886 01*	\$6,177 42*
Almira	190 02	135 42	145 58	614 37*
Anacortes	5,849 97*	.....	.....	.....
Arlington	3,860 55*	.....	.....	.....
Auburn	115 80*	121 14*	300 25*	915 57*
Bellingham	14,412 16*	11,987 93*	8,876 77*	6,942 26*
Battleground .....	.....	265 16*	906 06*	347 22*
Bothell	1,829 85*	.....	.....	.....
Bremerton	3,254 50*	4,456 70*	3,485 29*	2,671 13*
Buckley	2,228 03*	2,019 65*	2,213 09*	1,939 09*
Burlington	4,215 02*	.....	.....	.....
Centralia	2,697 74	2,176 68	1,313 51*	1,041 94*
Camp Lewis .....	.....	.....	1,036 00*	8,134 96*
Chehalis .....	.....	1,516 15	1,008 95	1,358 59
Cle Elum	1,473 18*	1,400 98*	1,842 23*	1,990 09
Colfax	1,904 84	2,797 69	1,284 86	485 90*
Colville	617 60*	183 07*	800 06*	2,269 37*
Coulee City	178 27	204 36	101 14	189 24*
Coupeville	929 99*	.....	.....	.....
Deer Park	3,443 63*	1,617 01*	3,772 80*	3,587 46*
Dayton	645 29*	706 87	241 12	296 46*
Edison	427 21*	.....	.....	.....
Edwall	133 56*	78 12*	99 20*	109 69*
Enumclaw	599 22*	206 08*	790 03*	417 34*
Ephrata	177 52*	220 51*	125 70	38 24
Everett	6,892 52*	.....	.....	.....
Harrington	532 44*	209 81*	1,149 29*	1,584 90*
Hartline	156 03*	165 00*	337 54*	236 15*
Hoquiam	6,128 56	8,580 56	5,657 09	3,156 89
Hatton .....	.....	40 68*	718 77*	205 59*
Issaquah	788 21*	836 37*	615 85*	935 05*
Kent	1,152 85*	1,622 58*	538 10*	117 82*
Lind	191 42	134 58	7 49	269 36*
Monroe	3,877 52*	.....	.....	.....
Mount Vernon	5,646 70*	.....	.....	.....
Marcus .....	.....	.....	127 05	724 67*
Medina .....	.....	.....	436 81*	126 44*
Newport	1,253 17*	1,165 59*	1,510 77*	1,348 21*
Northport	1,263 03*	1,044 52*	1,069 65*	834 07*
North Yakima	11,161 65	16,438 59	3,855 09	2,593 64
Oak Harbor	1,029 17*	.....	.....	.....
Odessa	608 23*	605 06*	1,214 87*	1,216 74*
Okanogan	309 64*	54 94*	1,696 38*	1,451 17*
Olympia	4,990 58	6,222 60	2,249 64	3,421 16
Oroville .....	.....	704 97*	1,950 32*	1,965 58*
Palouse	1,683 26*	1,555 92*	2,490 74*	2,096 40*
Pasco .....	.....	1,287 58	1,637 96	899 70
Pateros	790 31*	514 32*	519 07*	431 48*
Pomeroy	749 63*	681 44*	1,098 80*	1,512 31*
Port Blakeley	1,342 43*	4,844 66*	2,804 64*	1,980 89*
Port Madison	337 16*	872 71*	637 16*	486 00*
Port Orchard	1,463 38*	3,319 35*	2,891 16*	2,558 56*
Raymond	581 78*	426 67*	2,506 61	2,419 51
Renton	1,276 52*	1,811 46*	1,301 50*	1,222 57*

	1915	1916	1917	9 Months 1918
Ritzville	238 37*	273 65	79 02*	392 66*
Roy	462 52*	20 90*	192 68*	257 12*
Riverside		455 31*	1,099 27*	629 87*
Seattle	257,566 32	302,107 82	235,268 66	226,942 79
Sedro Woolley	4,033 04*			
Shelton	467 75*	761 87*	898 32*	1,308 98*
Silverdale	901 71*	2,255 03*	2,205 41*	2,491 46*
Snohomish	4,528 96*			
South Bend	351 63*	1,438 71*	1,215 62*	248 79
Sprague	610 04*	430 96*	1,168 15*	891 36*
Sultan	1,951 75*			
Stanwood	3,625 54*			
Sumner	4,255 67*	2,467 45*	2,449 51*	2,267 84*
Tacoma	30,754 03*	2,049 07	7,462 43*	8,518 46*
Vancouver	2,264 09*	2,927 66*	8,001 48*	6,302 24*
Vashon		637 16*		
Waitsburg	1,108 04*	814 60*	1,182 56*	1,020 76*
Walla Walla	16,386 59	21,332 79	18,580 16	11,638 30
Wilbur	375 38*	119 07*	670 80*	1,337 00*
Wilson Creek	299 47*	323 35*	314 79*	452 82*
Yacolt		958 04*	1,877 64*	1,573 44*
Miscellaneous Exchanges	24,571 04*	18,176 50*	9,749 07*	9,372 38*

* Indicates red figures.

XV.

The rate of return in the State of Washington, based upon the rate base as found by the Commission as of December 31, 1914, with net additions by years, using average plant value, is as follows:

	Using Exchange and 30% Toll Revenue	Using Exchange and Total Toll Revenue
1915	0.49%*	2.38%
1916	0.27%*	3.85%
1917	0.31%*	3.93%
1918	1.11%*	3.69%

* Indicates red figures.

XVI.

The rate of return by communities in the State of Washington, based upon the rate base as found by the Commission as of December 31, 1914, with net additions by years, using average plant value, is as follows:

	1915 Per Cent.	1916 Per Cent.	1917 Per Cent.	1918 Per Cent.
Aberdeen	0.08*	1.49	3.13*	3.12*
Almira	0.83	4.81	3.77*	16.83*
Anacortes	12.58*			
Arlington	8.95*			
Auburn	0.53*	0.54*	1.82*	5.08*
Bellingham	2.41*	2.02*	1.49*	15.38*
Battleground		23.31*	36.43*	18.37*
Bothell	15.25*			
Bremerton	10.53*	7.20*	5.41*	5.00*
Buckley	31.10*	28.25*	30.26*	34.48*
Burlington	13.81*			
Centralia	3.74	2.97	1.74*	1.80*
Camp Lewis			9.03*	30.95*
Chehalis		5.67	1.86	3.27
Cle Elum	11.85*	10.64*	12.69*	16.96*
Colfax	3.64	5.10	2.30	1.16*

	1915 Per Cent.	1916 Per Cent.	1917 Per Cent.	1918 Per Cent.
Colville	3.40*	0.85*	4.22*	15.58*
Coulee City	7.06	6.96	2.79	6.23*
Coupeville	12.70*	.....	.....	.....
Dayton	1.78*	1.92	0.65	1.05*
Deer Park	54.38*	24.19*	50.65*	59.00*
Edison	15.70*	.....	.....	.....
Edwall	8.04*	4.29*	5.02*	7.35*
Enumclaw	7.47*	2.33*	8.49*	5.90*
Ephrata	3.76*	4.55*	2.46	.93
Everett	2.30*	.....	.....	.....
Harrington	7.13*	2.44*	11.98*	21.05*
Hartline	19.98*	17.10*	28.90*	26.15*
Hoquiam	7.77	10.59	6.72	4.83
Hatton .....	.....	12.93*	113.01*	43.10*
Issaquah	18.22*	17.79*	11.48*	21.44*
Kent	9.21*	6.46*	2.08*	5.87*
Lind	3.91	2.66	0.14	6.77
Monroe	11.28*	.....	.....	.....
Mount Vernon	12.35*	.....	.....	.....
Marcus .....	.....	.....	6.71	18.23*
Medina .....	.....	.....	14.87*	4.28*
Newport	26.06*	12.59*	17.07*	28.37*
Northport	36.80*	20.10*	15.14*	12.71*
Yakima	3.80	5.46	1.24	1.08
Oak Harbor	21.47*	.....	.....	.....
Odessa	11.55*	10.27*	18.20*	22.87*
Okanogan	10.90*	0.78*	21.35*	21.63*
Olympia	4.42	5.03	1.66	3.21
Oroville .....	.....	13.83*	17.44*	21.40*
Palouse	11.32*	10.53*	16.82*	18.83*
Pasco .....	.....	10.76	6.42	4.39
Pateros	30.30*	17.10*	16.05*	16.53*
Pomeroy	2.53*	2.26*	3.56*	6.39*
Port Blakeley	14.62*	23.35*	14.92*	13.85*
Port Madison	18.43*	24.20*	17.28*	16.80*
Port Orchard	8.78*	13.35*	11.42*	13.10*
Raymond	5.69*	2.00*	10.78	12.84
Renton	7.76*	6.98*	4.96*	6.14*
Ritzville	0.99	1.08	.28*	1.80*
Roy	26.50*	1.07*	9.74*	17.65*
Riverside .....	.....	72.33*	78.61*	54.05*
Seattle	3.88	4.55	3.49	4.39
Sedro Woolley	10.24*	.....	.....	.....
Shelton	6.81*	10.55*	11.92*	22.73*
Silverdale	12.47*	23.86*	23.00*	34.30*
Snohomish	13.37*	.....	.....	.....
South Bend	4.36*	9.00*	7.50*	2.01
Sprague	5.22*	3.65*	9.72*	9.74*
Sultan	44.02*	.....	.....	.....
Stanwood	20.64*	.....	.....	.....
Sumner	16.56*	15.12*	3.03*	18.40*
Tacoma	1.29*	.085	.30*	.45*
Vancouver	1.65*	2.10*	5.47*	5.33*
Vashon .....	.....	21.44*	.....	.....
Waitsburg	9.32*	6.74*	9.70*	10.97*
Walla Walla	5.23	6.51	5.41	4.36
Wilbur	3.80*	1.19*	6.27*	15.57*
Wilson Creek	14.59*	15.27*	14.56*	28.45*
Yacolt .....	.....	39.60*	33.10*	34.90*
Miscellaneous Exchanges	14.76*	10.82*	5.80*	7.12*

* Indicates red figures.

XVII.

The following is a comparative income statement for the State of Washington for the months of August and September, 1917 and 1918, reflecting increased costs of labor and material:

	<i>August and September</i>	
	<i>1917</i>	<i>1918</i>
Exchange revenue	\$513,295 96	\$552,913 33
Toll revenue	183,243 83	204,676 48
Miscellaneous revenue	13,030 39	14,666 11
Licensee revenue	24,647 14*	27,651 08*
Total revenue	\$684,923 04	\$744,604 84
Operating expenses	\$358,004 44	\$399,289 47
Taxes	38,047 24	44,608 56
Depreciation	152,404 56	156,370 00
Total expenses	\$548,456 24	\$600,268 03
Amount earned	\$136,466 80	\$144,336 81
Average plant value.....	\$15,986,493 00	\$16,402,449 00
Per cent earned.....	.85	.88

* Indicates red figures.

XVIII.

The data set forth in paragraphs X to XVII inclusive was gathered by the experts of the Public Service Commission of Washington from the books of the Pacific Telephone and Telegraph Company, and the annual reports of this Commission. Set up in another form and covering somewhat different period of operation, the Pacific Telephone and Telegraph Company has produced and introduced as evidence several schedules. From these schedules they have made the following condensed statement which forms part of the proofs in this case:

State of Washington, Year 1919 Estimates—Areas Proportional to Rate Base Value.

Legend.

- | | |
|---------------|------------------------|
| 1. Rate base. | 4. Net revenues. |
| 2. Revenues. | 5. Return. |
| 3. Expenses. | 6. Per cent. of total. |

	<i>Present</i>	<i>Proposed</i>	<i>Present</i>	<i>Proposed</i>
	<i>Seattle</i>		<i>Tacoma</i>	
1.	\$7,386,323	\$7,386,323	\$2,574,438	\$2,574,438
2.	2,238,100	2,493,500	568,000	680,800
3.	2,111,400	2,111,400	619,300	619,300
4.	126,700	382,100	51,300*	61,500
5.	1.70%	5.17%	1.99%*	2.39%
6.	43.0	43.0	15.0	15.0
	<i>Bellingham</i>		<i>Yakima</i>	
1.	\$611,115	\$611,165	\$332,675	\$332,675
2.	112,300	140,100	104,400	128,700
3.	125,700	125,700	104,820	104,820
4.	13,400*	14,400	420*	23,880
5.	2.19%*	2.36%	.13%*	6.88%
6.	3.6	3.6	1.9	1.9

<i>Aberdeen-Hoquiam</i>				<i>Walla Walla</i>	
1.	\$363,670	\$363,670		\$365,658	\$365,658
2.	108,700	134,900		106,000	119,350
3.	117,010	117,010		94,355	94,355
4.	8,300*	17,890		11,645	24,995
5.	2.28%	4.92%		3.19%	6.85%
6.	2.1	2.1		2.1	2.1
**					
<i>Balance of Exchanges</i>				<i>Toll Lines</i>	
1.	\$1,330,374	\$1,330,374		\$4,203,892	\$4,203,892
2.	485,960	582,365		1,042,000	1,045,500
3.	599,880	599,880		488,000	488,000
4.	113,920*	17,515*		554,000	557,300
5.	8.56%*	1.32%*		13.17%	13.25%
6.	7.8	7.8		24.5	24.5
				<i>State</i>	
				<i>Present</i>	<i>Proposed</i>
1.				\$17,167,995	\$17,167,995
2.				4,765,460	5,325,015
3.				4,260,465	4,260,465
4.				504,995	1,064,550
5.					
6.				100	100
Compensation for property.....				884,703	884,703
Margin to government over total operations.....				379,708*	179,847

* Indicates red figures.

** (Under proposed) without reference to toll rates effective January 21, 1919.

XIX.

Valuation of Property.

The total book value of the Pacific Telephone & Telegraph Company's property in Washington, Oregon, Idaho, Nevada and California, including the Home Telephone & Telegraph Company of Spokane, is \$95,915,422.00. Of this sum \$19,203,782.00 represents the book value of the properties of the Pacific Telephone & Telegraph Company and the Home Telephone & Telegraph Company of Spokane in the State of Washington. Practically twenty per cent (20%) of the total property of the Pacific Telephone & Telegraph Company is in the State of Washington. As the government is to pay the Pacific Telephone & Telegraph Company, under the agreement with the postmaster general, \$4,233,233.00, in a sense, Washington's share of this compensation would be \$846,647.00. In its 1919 estimate, the Pacific Telephone & Telegraph Company considers \$884,703.00 as compensation for its property; this would be a rate of return upon the property in Washington, exclusive of Spokane, of 5.15 per cent. The foregoing book value is different in Washington from the rate base found by the Commission plus net additions by years. The rate base in Washington with net additions by years as of December 31, 1918, three months of 1918 being estimated, is \$16,641,145.00. The estimated net additions for the year 1919 are \$1,053,700.00, or a total as of December 31, 1919, of \$17,694,845.00, making an average for the year 1919 of \$17,167,995.00.

XX.

Additions to Property, 1919.

Of the estimated net additions to property for 1919, the greater proportion thereof is allotted as follows:

Seattle	\$653,500 00
Tacoma	49,500 00
Vancouver	17,400 00
Walla Walla	14,700 00
Aberdeen and Hoquiam.....	10,800 00
Bellingham	9,600 00
Yakima	9,550 00
Olympia	5,100 00

XXI.

Return Under Compensation Agreement.

The book value of the holdings of the Pacific Telephone & Telegraph Company's Pacific Coast system is \$95,915,422.00. The compensation to be allowed for the company's Pacific Coast holdings is \$4,233,233.00, or a rate of return of 4.41 per cent.

XXII.

Percentage of Increase Proposed.

The estimated percentage of increased rates on exchange service under Tariff W. P. S. C. No. 2 is 16.8 per cent.

XXIII.

Reduction in Toll Rates.

On December 18, 1918, the postmaster general promulgated his general order No. 2495 to become effective January 21, 1919, under and by virtue of which he did, in substance, establish a new schedule of toll rates, which, among other things, lengthened the initial period of certain calls and provided reduced night rates, the effect of which is to reduce the toll service income and this reduction is estimated at \$68,851.00 for the year 1919.

XXIV.

Increased Wages.

As of October 16, 1918, the wages of all operators of the Pacific Telephone & Telegraph Company were advanced twenty per cent (20%), estimated \$300,000.00 for the year 1919. This advance did not greatly affect the operating expenses of 1918, but will materially increase the operating expenses of 1919. We find no advance in the salaries of officials and heads of the principal operating departments. During the war period there has been a constant increase in cost of material. The evidence tends to show that while there may be a drop in raw material no appreciable lowering of prices is anticipated in manufactured articles during the immediate future.

XXV.

Service Investigations.

Preceding the hearing in this cause the Commission instituted a study of the telephone service in various exchanges in the state with the following result:

Telephone Service Tests, December, 1918.

Location	Number of Calls	Operator Answers Seconds	Called Party Answers Seconds	Operator Disconnects Seconds
Aberdeen	41	3.98	26.22	4.07
Bellingham	26	3.88	28.58	3.88
Centralia	8	7.25	25.00	4.71
Olympia	36	4.22	25.14	4.55
Spokane	24	4.08	38.46	4.88
Seattle	72	4.22	29.99	4.86
Tacoma	42	4.43	25.59	4.95
Vancouver	10	4.20	24.50	4.90

At the instance of the Commission, several well known firms in the State of Washington made a test of their telephone service, among others being the McClintock-Trunkey Company, wholesale grocers, Spokane. They report as follows:

We have called up six different business firms at intervals between ten and twelve o'clock this morning. From the time the Home Company operator accepted the call until the operator at the other end of the line responded it was as follows:

Maxwell 21	13 seconds
Maxwell 1442	10 seconds
Riverside 51	10 seconds
Riverside 2364	18 seconds
Riverside 123	11 seconds
Main 183	10 seconds

We consider this most excellent service.

Holley-Mason Hardware Company of the same place, after making a test, states:

We consider the telephone service very satisfactory and have no complaint to make so far as service is concerned, but we do feel that the charges are more than they should be.

Burroughs Adding Machine Company of Spokane reports the following time in getting central:

6 seconds	4 seconds
35 seconds	2 seconds
4 seconds	6 seconds

John W. Graham & Co., of Spokane, concludes:

We consider the telephone service entirely satisfactory, and have no complaint to make so far as service is concerned.

At Yakima, Yakima Iron Works report for completed calls as follows:

1 minute	$\frac{1}{2}$ minute
1 $\frac{1}{2}$ minutes	$\frac{1}{2}$ minute
$\frac{1}{2}$ minute	1 minute

The United States Reclamation Service at the same point reports completed calls as follows:

1 minute	2 minutes
2 minutes	1 minute
1 minute	2 minutes

The Mercy Amusement Company of Yakima reports parties secured as follows:

20 seconds	12 seconds
30 seconds	23 seconds
10 seconds	21 seconds

Subsequent to the hearing, owing to an editorial appearing in one of the leading newspapers of the state attacking the credibility and judgment of one of the witnesses at the hearing called by the Commission, and which editorial also reflected upon the operators of the exchanges, we caused a further study to be made, with the following result:

Telephone Service Test, Seattle, January, 1919.

	Number of Calls	Operator Answers Seconds	Operator Disconnects Seconds
Post-Intelligencer	10	3.65	4.55
The Times	12	3.83	4.33
Merchants Exchange	12	3.50	4.25
Arctic Club	10	4.25	4.85
Union Record	12	3.70	4.30
Star	12	4.54	5.96
Total	68		
Average		3.90	4.69

Opinion.

We fully realize the gravity of the situation under which we are laboring. The order which we are about to enter in this case will increase the telephone bills of nearly one hundred fifty thousand (150,000) patrons in the State of Washington. Against these patrons stands only the postmaster general of the United States, and, independent of any increase of telephone rates, he is being assailed from many angles. We are inclined to think that not all complaints entered against him are well founded. Congress, in its wisdom, saw fit to empower the president of the United States to take over all telephone and telegraph systems of the country. As this authorization was a war measure, we must presume that Congress acted with a thorough understanding of the gravity of the situation, and that this condition still continues or Congress would reverse its action. The president, under the joint resolution of Congress, having taken control of the telephone and telegraph systems, it was but natural and logical that their operation should be placed in the postoffice department, as this is the department of communications. Before the government took possession of the telephone systems of the United States, this Commission knew that the Pacific Telephone & Telegraph Company was endeavoring to keep away, as long as possible, from increasing rates.

The question of wages of operators, however, was becoming month by month more intense and for quite a long period, the Commission was of the

opinion from information generally gathered that the wages of the operators were too low and incompatible with their necessities, and we are firmly convinced that the wage increase as of October was highly meritorious. The study made by this Commission clearly indicates that the telephone operators of the State of Washington are on a par with the operators in other parts of the United States. A perusal of the study set forth in a foregoing paragraph clearly demonstrates that the fault of an imperfect telephone service in the State of Washington is far more attributable to the slowness in which persons called respond than to any lack of efficiency on the part of the operators. Persons who refuse to answer their phones promptly should appreciate the fact that their delay and other like delays force upon an operator the supervision of many uncompleted calls and a single jarring word uttered, under such circumstances, to an operator may disconcert and confuse her in properly handling her work in hand.

While the contract between the postmaster general and the American Telephone and Telegraph Company, or the Bell System and its constituent companies joining, is not very much involved in this hearing, we have nevertheless given it considerable thought and can not see in what manner it can be said that the compensation allowed the Pacific Telephone & Telegraph Company for the use of its property upon this coast is unreasonable or unfair. Taking the valuation as found by the Commission as of December 31, 1914, and adding thereto the additions and betterments and dividing this sum by the number of telephones in this state, which is 143,853, shows a value per station of \$144.84. Applying this cost per station to the total number of stations of the Pacific Company's system, which is 714,931, shows a value somewhat greater than the book cost of \$95,915,422.00; therefore, we are safe in assuming that the value of \$95,915,422.00 of the company's holdings in the five states is approximately correct. At this value the compensation allowed the Pacific Telephone & Telegraph Company for its property, gives a rate upon the \$95,915,422.00 of $4\frac{1}{2}$ per cent. The government has approved of the usual $4\frac{1}{2}$ per cent contract made between the Bell System and its constituent companies. At a large expense this Commission several years ago made a thorough investigation of this contract but at that time entered no order concerning it. We have reached the conclusion that it is a beneficial arrangement conducive to telephonic development and service. A number of other state commissions have analyzed and discussed it and in the main have supported it. When we consider the property owned by the Pacific Telephone & Telegraph Company in the State of Washington and the rate base heretofore determined by this Commission, the net additions thereto by years and the proposed increase in rates under the postmaster general's tariff, W. P. S. C. No. 2, which is calculated would give a rate of return of 6.20 per cent, we can not deem this rate of return other than reasonable. It is true that this rate of return is somewhat more than the rate of return provided by the contract of the postmaster general for the use of the Pacific Telephone & Telegraph Company's property in this state, but this margin which has been estimated at \$179,847.00 is not excessive in a business that may be at a peak particularly as to toll earnings with little or no hope of a fall in wages and but a slight prospect of a reduction in the cost of manufactured articles. A study of the operating revenues of the Pacific Telephone & Telegraph Company during 1918 clearly demon-

strates that the increase in earnings has almost wholly arisen from the toll service and we are forced to conclude that the speed of the war period will slacken and the mail will to an appreciable extent take the place of the long distance message.

In one of the briefs filed in this cause it is declared that "in war and under abnormal conditions companies cannot expect to earn a return upon their investments which would in ordinary times be deemed reasonable," and the cases cited in support of this doctrine are:

Re Holyoke Street Railway Co., P. U. R. 1918-B, 212.

Re Empire Gas & Electric Co., P. U. R. 1918-D, 912.

Re Haverhill Gas Light Co., P. U. R. 1918-B, 151.

Re Long Island Railroad Co., P. U. R. 1918-A, 649.

Re Home Telephone Co., P. U. R. 1918-C, 489.

We have no quarrel with the doctrine so announced, but to appreciate its applicability to the facts now before this Commission, let us examine those cases. The Holyoke case holds that under the abnormal conditions caused by a state of war, the stockholders of a street railway utility ought not to expect a dividend rate higher than six per cent (6%). As the Pacific Company is receiving only $4\frac{1}{2}$ per cent from the federal government and the government will not, in all probability, earn 6 per cent upon the rate base in this state under the proposed rates, the Holyoke case would appear to be in favor of the government's contention. In the Empire decision, it is stated, "It is estimated these rates will afford such an increase in revenue and should insure the payment of interest on the funded debt and dividends upon the preferred stock. They should also provide a moderate surplus available for dividends on the common stock." This is compatible with the position of the government in the case at bar. In the Haverhill case this language is used:

It was clearly stated at the hearings that the company desired an increase of fifteen cents per thousand feet in order to enable it to continue to pay a nine per cent. dividend. In view of the history of this company I am unwilling that it should receive such an award.

The Long Island case concerned an overbuilt plant that had only a future as no dividends had ever been paid and the Commission uses this language:

At the hearings no pretense was made to an advance in rates to yield a higher profit than had been earned in previous years.

In the Home Telephone case the Commission states:

Here is a company that has experienced a most unusual prosperity. Its past years have all been fat years. At this time of national need when men and institutions are called upon to sacrifice as they have never sacrificed before—when the full loaf is no longer asked or given—would it not be proper to ask if necessary (which it is not) that the company now resort to the surplus of previous years and make up for any partial loss of profits if necessary from the excess profits of the past?

If this case has any applicability to the Pacific Company which earned in 1915 in the State of Washington 2.38 per cent; in 1916, 3.85 per cent; 1917, 3.93 per cent; and 1918 (9 months) at the rate of 3.69 per cent per annum, we fail to appreciate it.

Thirty per cent (30%) of all toll earnings is credited to the communities originating the outgoing messages. The testimony in this case reveals the fact that all lines used for toll service between exchanges are treated as a part of the toll plant and the value of the toll plant has never been apportioned to the communities as has the exchange plant; thus some of the percentages shown by the exhibits of the Commission where the total revenue of toll service for the nine (9) months of 1918 was apportioned to the communities and the toll plant was not apportioned, establishes a percentage without reference to a true rate base.

The postmaster general has seen fit to reduce certain toll rates in this and other states. While the rate of return upon toll service is high and the rate of return upon exchange service is low, we are nevertheless of the opinion that the toll service can better stand the high rates and there will be less friction in maintaining a toll service thereunder than under marked increase in exchange rates. We are, however, not disposed to disturb Tariff W. P. S. C. No. 2 (which covers exchange only) on this ground. We have found it necessary on two different occasions to suspend Tariff W. P. S. C. No. 2. In each instance we have stated that any order which we might make would relate back to December 6, 1918, and we will so word this order. If this leads to a complication in billing for past service we will entertain an application of the postmaster general to make this order effective from some distinct billing date.

We are led to believe from the testimony that the proposed increase of rates of the Home Telephone & Telegraph Company of Spokane was not so fully considered as it should have been and before rendering a decision in that case it is probable that further testimony should be taken. The government, however, in dealing with the Pacific Telephone & Telegraph Company, has considered the coast as a whole and had we considered Spokane in this opinion and calculated the return in that city based upon the postmaster general's proposed tariff, our figures would materially change. The \$179,847.00 margin would shrink to \$40,881.00. If in a further consideration of the Spokane situation the postmaster general's tariff for that city should be modified and substantially reduced, the \$40,881.00 may disappear.

We believe that the thoughtful people of our state do not question that the federal government shall not support telephone operation in whole or in part by general taxation and that the tariffs in each state should be sufficiently high to create an operating income sufficient to meet operating expenses and the compensation agreed upon between the federal government and the various companies where such compensation is reasonable. What our people demand and are entitled to is an efficient service and that the money raised in the State of Washington shall be spent in this state. These two factors are agreed upon between the postmaster general and this Commission as evidenced by communications.

Wherefore, It Is Ordered, That each and all protests to the postmaster general's tariff, W. P. S. C. No. 2, of the Pacific Telephone & Telegraph Company be, and the same are hereby, overruled; and

It Is Further Ordered, That the postmaster general's tariff, W. P. S. C. No. 2, of the Pacific Telephone & Telegraph Company shall become effective as of date December 6, 1918; and

It Is Further Ordered, That all contracts in conflict with the rates provided for in postmaster general's tariff, W. P. S. C. No. 2, of the Pacific Telephone & Telegraph Company be terminated.

Witness, The Public Service Commission of Washington, this 13th day of February, 1919.

The cause came on for further hearing at Spokane, Washington, March 10, 1919, as a result of which the Commission entered the following Findings and Order:

I.

The Home Telephone & Telegraph Company of Spokane is a corporation owning a telephone and telegraph system in the city of Spokane; and, as such corporation, on and prior to the 31st day of July, 1918, was operating such telephone and telegraph system for hire in said city.

II.

Resolution of Congress.

July 16, 1918, the senate and house of representatives of the United States of America, by joint resolution, authorized the president of the United States to take possession, control and operate all telephone and telegraph lines in the United States.

III.

President Assumes Control.

July 31, 1918, the president of the United States, under and by virtue of the joint resolution mentioned in the preceding paragraph, did assume possession and control and did undertake the operation of all the telephone and telegraph lines in the United States.

IV.

Proposed Tariffs Filed.

November 6, 1918, the Home Telephone & Telegraph Company of Spokane, with the approval of the postmaster general, filed with this Commission certain tariffs numbered W. P. S. C. No. 2, bearing the notation "Effective November 15, 1918, unless and until otherwise ordered by the postmaster general of the United States, or otherwise, according to law," which tariffs, if effective, would generally increase the exchange rates of the Home Telephone & Telegraph Company in the city of Spokane.

V.

Protests Against Tariffs.

Immediately following the filing of said W. P. S. C. No. 2, various protests were entered against the proposed increase in rates, and telegrams and letters relative thereto were exchanged between the postmaster general and the Public Service Commission of Washington.

VI.**Instructions From Postmaster General.**

November 27, 1918, the Public Service Commission of Washington received from the postmaster general a telegram, stating among other things as follows:

Replying to your telegram twenty-sixth apparently sent before you received my telegram of same date please strike out from rate schedule filed on November sixth the date November fifteenth and substitute December sixth as the effective date. Please proceed to hear complaints in accordance with your regular procedure and dispose of the matter in the regular way * * *

VII.**Challenge to Jurisdiction.**

Practically at the opening of the hearing in this cause the assistant corporation counsel of Seattle, speaking on behalf of the city of Seattle and other cities, asserted: "We want to present right here our challenge to the jurisdiction of this body (The Public Service Commission of Washington) to sit in any capacity."

VIII.

November 29, 1918, the Commission suspended the operation of said tariffs and on January 23, 1919, and February 20, 1919, made further suspensions of the same.

IX.**Contract of Government With Bell System.**

October 4, 1918, the American Telephone & Telegraph Company, in behalf of itself and each constituent company of the Bell System thereafter joining therein, made a proposal offering to accept the just compensation named in such proposal for the supervision, possession, control and operation of the Bell System taken by the president of the United States at 12 o'clock midnight on July 31, 1918; said proposal being accepted October 5, 1918, by the postmaster general by order No. 2085.

October 14, 1918, the Pacific Telephone & Telegraph Company, in writing, indicated to the postmaster general its purpose to join in and that it did join in said proposal.

December 6, 1918, in furtherance of said proposal, an understanding was entered into between the American Telephone & Telegraph Company, under and by virtue of which, the Pacific Telephone & Telegraph Company was to receive from the general compensation awarded the Bell System an annual amount of \$4,233,233.00, subject to corrections for errors in computations. Said amount is, however, subject to change to meet future conditions although not in a substantial manner. The contract between the postmaster general and the Bell System and the agreement between the Bell System and the Pacific Telephone & Telegraph Company provides for an annual depreciation of 5.72 per cent as applied to the book value of the property. The compensation to the Bell System as set out in section 7 of the contract between it and the postmaster general is as follows:

Section 7. (a) The Postmaster General shall pay to the American Company for each year, and pro rata for each fractional part of a year during the period of Federal control, an amount equal to the sum of the following four items: Item (1) the annual interest and existing amortization charges on all

outstanding securities or obligations of the Bell System in the hands of the public, including \$48,367,200.00 of the American Company's Seven-Year Six Per Cent. Convertible Gold Bonds, dated August 1, 1918, due August 1, 1925, item (2) dividends for the period of one year upon the share capital of the Bell System outstanding July 31, 1918, in the hands of the public, at the average rate of regular dividends paid thereon during the three years ending December 31, 1917, which items (1) and (2) aggregate sixty-five million one hundred forty-eight thousand six hundred and forty-one dollars (\$65,148,641), subject to corrections for errors in computations, if any, item (3) the annual charge for interest and dividends and other costs of securing necessary additional capital for such expenditures as may be made at the request of the Postmaster General, and item (4) the annual charge for such interest and dividends as the Bell System may be required to pay on new securities or share capital issued for the discharge, conversion or renewal of present obligations, including sinking fund obligations, and for additional interest and charges to secure extensions on existing securities.

(b) The said compensation shall be paid to the American Company in monthly installments on the last day of each calendar month during the period of Federal control, except that installments which have accrued prior to the acceptance of this proposal shall be payable at the date of such acceptance; such payments to the American Company to operate to fully satisfy and discharge all claims of the constituent companies and each of them on account of the amounts so paid.

If any constituent company shall fail to join in this proposal, as provided by section 12 thereof, the following deductions shall be made from the above mentioned items (1) and (2).

(1) There shall be deducted an amount equal to the annual interest and existing amortization charges, on all outstanding securities or obligations of such non-joining constituent company; and

(2) There shall be deducted an amount equal to dividends for the period of one (1) year, at the average rate paid during the three (3) years ending December 31, 1917, upon the share capital of such non-joining constituent company outstanding on July 31, 1918.

X.

Four and One-Half Per Cent Contract.

Between the Bell System and its constituent companies there has, for many years, existed what is known as the four and one-half per cent ($4\frac{1}{2}\%$) contract. This contract is recognized and made a part of the agreement between the Bell System and the constituent companies joining and the postmaster general.

XI.

The book value of the plant of the Pacific Telephone & Telegraph Company system as of December 31, 1917, is as follows:

	Real Estate	Plant	Total
Washington (including the Home Telephone & Telegraph Company of Spokane)	\$1,652,415	\$17,551,367	\$19,203,782
Oregon	1,505,729	9,516,167	10,566,896
Idaho .....	.....	341,187	341,187
Nevada	559	825,458	826,017
California	4,958,537	60,019,003	64,977,540
Totals.....	\$7,662,240	\$88,253,182	\$95,915,422

XII.

There has been a physical union of the telephone plants of the old Home automatic and the Pacific manual in Spokane and vicinity. In such consolidation, property of the automatic of the value of \$423,000 has been eliminated as not used and useful.

As of December 31, 1914, the Commission valued the manual system at \$3,387,264.86. The subsequent net plant additions are as follows:

1915	\$123,565 14
1916	127,967 00
1917	3,937 00
1918 (9 months).....	1,004 00*
Total additions	\$254,465 14
Total value, including additions.....	\$3,641,730 00

* Deduction.

In these net additions to plant there is included \$132,000.00 of property of the automatic system as used and useful. For the purpose of this hearing we deem \$3,641,730.00 as the fair value of the property used and useful in rendering telephonic service in Spokane and vicinity by the Home Telephone and Telegraph Company of Spokane.

XIII

The earnings, operating expenses and per cent earned on the above average plant values, including thirty per cent (30%) toll, are as follows:

<i>Revenues.</i>	<i>1915</i>	<i>1916</i>	<i>1917</i>	<i>9 Months 1918</i>
Exchange revenue	\$546,651 84	\$681,234 73	\$734,142 47	\$553,384 75
Toll revenue	33,518 37	54,247 40	57,755 79	40,099 03
Miscellaneous revenue ..	11,743 16	14,088 15	15,402 44	16,608 44
Licensee revenue	25,897 43	32,135 12	35,175 74	26,438 40
Totals.....	\$566,015 94	\$717,435 16	\$772,124 96	\$583,653 82
<i>Expenses.</i>				
Operating expenses	\$332,201 10	\$392,489 05	\$443,488 34	\$498,498 24
Taxes	35,451 47	23,971 81	53,439 26	36,122 85
Depreciation	200,819 47	208,139 18	208,364 38	156,230 21
Totals.....	\$568,472 04	\$624,600 04	\$705,291 98	\$690,851 30
Amount earned	\$2,456 10*	\$92,835 12	\$66,832 98	\$107,197 48*
Average plant value.....	\$3,510,830 00	\$3,638,797 00	\$3,642,734 00	\$3,641,730 00
Per cent. earned.....	.70*	2.55	1.83	2.94*

* Indicates red figures.

XIV.

The data set forth in paragraphs XI to XIII inclusive was gathered by the experts of the Public Service Commission of Washington from the books of the Home Telephone & Telegraph Company, and the annual report to this Commission. Set up in another form and covering somewhat different period of operation, the Home Telephone & Telegraph Company has produced and introduced as evidence the following schedules which form part of the proofs in this case.

RATE BASE, YEAR 1919.

Commission decision of December 31, 1914.....	\$3,387,265
This, inclusive of property already in place, used and useful to consolidated service is as of December 31, 1916	\$3,613,441
Net additions, year 1917.....	28,047
Estimated net additions, year 1918.....	9,900
Total December 31, 1918.....	\$3,651,388
Estimated net additions, year 1919.....	34,800
Total December 31, 1919.....	\$3,686,188
Average, year 1919.....	\$3,668,788

XV.

THE HOME TELEPHONE AND TELEGRAPH COMPANY OF SPOKANE,
WASHINGTON.

Net Additions Year 1917.

	Auditor's Statement Year 1917	Items to Deduct	Corrected Net Additions Year 1917
Exchange right of way.....	\$16 74	.....	\$16 74
Land	35,486 75*	† 35,544 79*	58 04
Buildings	964 19	.....	964 19
Central office equipment.....	3,453 13*	‡ 8,058 85*	4,605 72
Station equipment	15,408 87	‡ 35 82*	15,444 69
Exchange pole lines	4,388 35	‡ 2,212 49*	6,600 84
Exchange aerial cable.....	14,987 06*	‡ 11,409 08*	3,577 98*
Exchange aerial wire.....	3,730 75	‡ 23 73*	3,754 48
Exchange underground conduits.....	2,838 32	‡ 597 47*	3,435 79
Exchange underground cable.....	40,917 47*	‡ 16,211 76*	24,705 71*
Toll pole lines.....	17,034 57	‡ 15,145 00	1,889 57
Toll aerial wire.....	16,580 23	‡ 19,606 00	3,025 77*
Toll underground conduits.....	32 98	.....	32 98
Toll underground cable.....	28,804 97	‡ 10,366 00	18,438 97
Office furniture and fixtures.....	86 98	.....	86 98
General shop equipment.....	85 80	.....	85 80
General store equipment.....	916 10	.....	916 10
General stable and garage equipment..	2,420 85	.....	2,420 85
General tools and implements.....	836 36	.....	836 36
Interest during construction.....	426 86	.....	426 86
Miscellaneous construction expenditures	27 72	.....	27 72
Construction work in progress.....	686 56*	.....	686 56*
Totals.....	\$930 33*	\$28,976 99*	\$28,046 66

* Indicates red figures.

† Entries of auditor per letter June 29, 1917, account errors original entry.

‡ Amounts of former home plant removed, treated by the company in appraisal of 1917 as not used and useful.

XVI.

THE HOME TELEPHONE AND TELEGRAPH COMPANY OF SPOKANE,
WASHINGTON.

Estimated Net Additions to Plant and Equipment.

	Year 1918	Year 1919
Exchange right of way.....		\$100
Buildings	\$400	600
Central office equipment.....	6,900	7,000
Station equipment	7,500	13,000
Exchange pole line.....	3,000	5,000
Exchange aerial cable.....	100	1,500
Exchange aerial wire.....	5,000*	6,000
Exchange underground conduits.....	900	500
Exchange underground cable.....	2,300*	1,000
Toll pole lines.....	800*	.....
Toll aerial wire.....	100	.....
Interest during construction.....	100	100
Construction work in progress.....	1,000*	.....
Totals.....	\$9,900	\$34,800

* Indicates red figures.

XVII.

THE HOME TELEPHONE AND TELEGRAPH COMPANY OF SPOKANE,
WASHINGTON.

Revenues and Expenses, Year 1919, Based on Present Rates.

Revenues:

Exchange service revenues.....	\$728,000
Toll service revenues.....	58,500
Miscellaneous operating revenues.....	17,000
Licensee revenue—Dr.	34,300*
Total.....	\$769,200

Expenses:

Plant	\$317,400
Traffic	313,000
Commercial	68,100
General	24,500
Uncollectible	5,800
Taxes	53,400
Rent deducted for telephone office.....	1,000
Rent deducted for C. P. & O. S.....	500
Amortization of landed capital.....	400

Total..... \$784,100

Balance net revenue.....	\$14,900*
Compensation for property.....	222,716
Margin to U. S. Government over total operations.....	\$237,616*
Rate base	\$3,668,788

* Indicates red figures.

XVIII.

**THE HOME TELEPHONE AND TELEGRAPH COMPANY OF SPOKANE,
WASHINGTON.****Revenues and Expenses, Year 1919, Based on Proposed Rates.****Revenues:**

Exchange service revenues.....	\$831,000
Toll service revenues.....	58,800
Miscellaneous operating revenues.....	16,900
Licensee revenues—Dr.	38,850*

Total.....	<u>\$867,850</u>
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Expenses:

Plant	\$317,400
Traffic	313,000
Commercial	68,100
General	24,500
Uncollectible	5,800
Taxes	53,400
Rent deducted for telephone office.....	1,000
Rent deducted for C. P. & O. S.....	500
Amortization of landed capital.....	400

Total.....	<u>\$784,100</u>
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Balance net revenue.....	\$83,750
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Compensation for property.....	<u>222,716</u>
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Margin to U. S. Government over total operations.....	<u>\$138,966*</u>
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Rate base	<u>\$3,668,788</u>
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* Indicates red figures.

XIX.

THE HOME TELEPHONE AND TELEGRAPH COMPANY OF SPOKANE,
WASHINGTON.

Estimated Revenues and Expenses.

	1918	1919 Present Rates (b)	1919	
			Proposed Rates (c)	Increase (c) over (a)
Revenues:	(a)			
Exchange service revenues...	\$750,000	\$728,000	\$831,000	\$81,000
Toll service revenues.....	53,400	58,500	58,800	5,400
Misc. operating revenues.....	17,000	17,000	16,900	100*
Licensee revenues—Dr.	35,100*	34,300*	38,850*	3,750*
Totals.....	\$785,300	\$769,200	\$867,850	\$82,550
Expense:				
Plant	\$321,800	\$317,400	\$317,400	\$4,400*
Traffic	276,700	313,000	313,000	36,300*
Commercial	66,700	68,100	68,100	1,400
General	24,500	24,500	24,500	.....
Uncollectible	7,500	5,800	5,800	1,700*
Taxes	48,500	53,400	53,400	4,900
Rent deducted for telephone offices	1,000	1,000	1,000	.....
Rent deducted for C. P. & O. S.	500	500	500	.....
Amort. of landed capital.....	400	400	400	.....
Totals.....	\$747,600	\$784,100	\$784,100	\$36,500
Balance net revenue.....	\$37,700	\$14,900*	\$83,750	\$46,050
Compensation for property.....		222,716	222,716	.....
Margin to U. S. Government over total operations		\$237,616*	\$138,966*	.....
Rate base	\$3,646,438	\$3,668,788	\$3,668,788	.....

* Indicates red figures.

XX.

THE HOME TELEPHONE AND TELEGRAPH COMPANY OF SPOKANE,
WASHINGTON.

Compensation as of July 31, 1918.

Compensation:	
Interest on bonds.....	\$150,000
Debt discount and expense.....	3,840
Other interest	68,876
	\$222,716

XXI.

Return Under Compensation Agreement.

The book value of the holdings of the Pacific Telephone & Telegraph Company's Pacific Coast system is \$95,915,422.00. The compensation to be allowed for the company's Pacific Coast holdings is \$4,233,233.00, or a rate of return of 4.41 per cent.

XXII.

Percentage of Increase Proposed.

The estimated percentage of increased rates on exchange service under Tariff W. P. S. C. No. 2 is 16.8 per cent for the state.

XXIII.

Reduction in Toll Rates.

On December 18, 1918, the postmaster general promulgated his general order No. 2495, to become effective January 21, 1919, under and by virtue of which he did, in substance, establish a new schedule of toll rates, which, among other things, lengthened the initial period of certain calls and provided reduced night rates, the effect of which is to reduce the toll service income and this reduction is estimated at \$68,851.00 for the year 1919.

XXIV.

Increased Wages.

As of October 16, 1918, the wages of all operators of the Pacific Telephone & Telegraph Company and the Home Telephone & Telegraph Company of Spokane were advanced twenty per cent (20%), estimated \$300,000 for the year 1919. This advance did not greatly affect the operating expenses of 1918, but will materially increase the operating expenses of 1919. We find no advance in the salaries of officials and heads of the principal operating departments. During the war period there has been a constant increase in cost of material. The evidence tends to show that while there may be a drop in raw material no appreciable lowering of prices is anticipated in manufactured articles during the immediate future.

XXV.

Service Investigations.

Preceding the hearing in this cause, the Commission instituted a study of the telephone service in various exchanges in the state with the following result:

TELEPHONE SERVICE TESTS, DECEMBER, 1918.

<i>Location</i>	<i>Number of Calls</i>	<i>Operator Answers Seconds</i>	<i>Called Party Answers Seconds</i>	<i>Operator Disconnects Seconds</i>
Aberdeen	41	3.98	26.22	4.07
Bellingham	26	3.88	28.58	3.88
Centralia	8	7.25	25.00	4.71
Olympia	36	4.22	25.14	4.55
Spokane	24	4.08	38.46	4.88
Seattle	72	4.22	29.99	4.86
Tacoma	42	4.43	25.59	4.95
Vancouver	10	4.20	24.50	4.90

At the instance of the Commission several well known firms in the State of Washington made a test of their telephone service, among others being

the McClintock-Trunkey Company, wholesale grocers, Spokane. They report as follows:

We have called up six different business firm at intervals between ten and twelve o'clock this morning. From the time the Home Company operator accepted the call until the operator at the other end of the line responded it was as follows:

Maxwell 21	13 Seconds
Maxwell 1442	10 seconds
Riverside 51	10 seconds
Riverside 2364	18 seconds
Riverside 123	11 seconds
Main 183	10 seconds

We consider this most excellent service.

Holley-Mason Hardware Company of the same place, after making a test, states:

We consider the telephone service very satisfactory and have no complaint to make so far as service is concerned, but we do feel that the charges are more than they should be.

Burroughs Adding Machine Company, of Spokane, reports the following time in getting central:

6 seconds	4 seconds
35 seconds	2 seconds
4 seconds	6 seconds

John W. Graham & Co., of Spokane, concludes:

We consider the telephone service entirely satisfactory, and have no complaint to make so far as service is concerned.

At Yakima, Yakima Iron Works report for completed calls as follows:

1 minute	$\frac{1}{2}$ minute
$1\frac{1}{2}$ minutes	$\frac{1}{2}$ minute
$\frac{1}{2}$ minute	1 minute

The United States Reclamation Service at the same point reports completed calls as follows:

1 minute	2 minutes
2 minutes	1 minute
1 minute	2 minutes

The Mercy Amusement Company of Yakima reports parties secured as follows:

20 seconds	12 seconds
30 seconds	23 seconds
10 seconds	21 seconds

XXVI.

In the three principal cities of the state the number of telephones in each is as follows:

Seattle	63,504
Spokane	24,002
Tacoma	17,082

XXVII.

In the past year the telephone development in the three cities mentioned is as follows:

Seattle	gain 3.352% or 5.58% per station.
Tacoma	gain 1.274% or 8.13% per station.
Spokane	loss 2.59% or 6.29% per station.

XXVIII.

In Schedule W. P. S. C. No. 2 as filed by the Pacific Telephone & Telegraph Company and the Home Telephone & Telegraph Company of Spokane, and approved by Postmaster General Burleson, the principal rates for these cities are as follows:

Seattle, individual business	\$8 50
Seattle, individual residence	3 75
Seattle, two-party residence	3 00
Seattle, four-party residence	2 50
Tacoma, individual business	7 00
Tacoma, two-party business	6 00
Tacoma, individual residence	3 00
Tacoma, two-party residence	2 50
Tacoma, four-party residence	2 00
Spokane, individual business	8 00
Spokane, individual residence	3 50
Spokane, two-party residence	2 75
Spokane, four-party residence	2 25

XXIX.

Taking into consideration the number of telephones, the loss in development and the population of Spokane, as compared with Seattle and Tacoma, the Commission is satisfied that the proposed schedule for Spokane is out of balance with the rates in Seattle and Tacoma, and that the rates are unjust to the Spokane patrons.

XXX.

The Home Telephone & Telegraph Company at the hearing on March 10th submitted a modified schedule for Spokane as follows:

<i>Class of Service.</i>	<i>Modified Proposal of March 10, 1919 Inclusive of Opportunity No Toll Rate Between</i>	
	<i>Wall</i>	<i>Desk</i>
Individual business flat.....	\$7 50	\$7 75
Individual business measured.....	5 50	5 75
Individual business prepay.....	4 50	4 75
Individual residence	3 25	3 50
Two-party residence	2 50	2 75
Four-party residence	2 00	2 25

XXXI.

The Commission finds that the rates contained in the above modified schedule are just and reasonable rates to be charged by the Home Telephone & Telegraph Company of Spokane.

XXXII.

In open session it was stipulated that Opportunity be considered as within the primary rate area of Spokane.

Order.

Wherefore, It Is Ordered, That the postmaster general's tariff W. P. S. C. No. 2 of the Home Telephone & Telegraph Company of Spokane, be modified in the following particulars:

<i>Class of Service.</i>	<i>Wall</i>	<i>Desk</i>
Individual business flat.....	\$7 50	\$7 75
Individual business measured.....	5 50	5 75
Individual business prepay.....	4 50	4 75
Individual residence	3 25	3 50
Two-party residence	2 50	2 75
Four-party residence	2 00	2 25

It Is Further Ordered, That Opportunity be considered as within the primary rate area of Spokane, with like rates.

It Is Further Ordered, That all contracts in conflict with the rates provided for in postmaster general's tariff W. P. S. C. No. 2, as modified, of the Home Telephone & Telegraph Company of Spokane be terminated.

It Is Further Ordered, That the effective date of said tariff as modified shall be April 1, 1919.

Witness, The Public Service Commission of Washington, this 20th day of March, 1919.

Subsequent to the entry of the foregoing findings and orders, the cities of Seattle and Tacoma perfected writs of review to the superior court of Thurston county. These writs were later consolidated, and the court May 12, 1919, sustained the judgment of the Commission. Both cities gave notice of appeal, and the matter was pending in the supreme court at the time of the return of the telephone lines to the management of their owners, July 31, 1919.

No. 4830.

The Public Service Commission of Washington, Complainant, v. Skagit River Telephone & Telegraph Company, Respondent.

Discrimination in the matter of rates charged by the respondent was brought to the attention of the Commission. An investigation of the matter was made. The hearing was held at Hamilton, Washington, June 13, 1919, and the following entered:

Findings of Fact.**I.**

The Skagit River Telephone & Telegraph Company is a corporation organized under and by virtue of the laws of the State of Washington, and owns and operates for hire the telephone system in Skagit county, Washington. Its main office is at the town of Hamilton and from this office it has wires extending to Sedro Woolley and intermediate points, to Concrete and intermediate points, a circuit leading northerly from Hamilton and a circuit leading south and westerly from Hamilton. It maintains a toll service from Hamilton to Sedro Woolley and a toll service to Concrete. The total number of stations or subscribers is approximately 272.

II.

In the town of Hamilton the Skagit River Telephone & Telegraph Company occupies the streets and places of said town by virtue of ordinance No. 68 of said town, passed April 13, 1912, and accepted in writing by the telephone and telegraph company May 2, 1912. Section 6-A of said ordinance reads as follows:

Section 6-A. And the said grantee, its successors and assigns, agrees to allow each subscriber free service from Hamilton to Sedro Woolley, and from Hamilton to Birdsvew and Lyman and intermediate points; also to maintain a telephone in the Great Northern depot, for the use of the agent, free of charge; and in case the Great Northern Company subsequently assumes the payment for such depot telephone, then the said grantee will place such free telephone in the town hall or in such other town institution as the town council may designate.

Subsequent to the passage of said ordinance, by some tacit agreement the number of free calls between subscribers within the town of Hamilton were limited to thirty calls each to Sedro Woolley, all calls above thirty being paid for in the same manner as subscribers outside of the town of Hamilton paid for theirs. The total number of free calls by the subscribers of Hamilton to Sedro Woolley averages 230 per month.

III.

The probable cost of constructing a plant of the character of the respondent company's is upwards of \$15,000.00.

IV.

During the year 1918 the company appears to have earned \$445.36, but this without allowing anything for depreciation.

V.

The streets and public places of the town of Hamilton appear to be no more burdened by the presence of the poles and wires of the respondent company upon them than do the public highways outside of the town of Hamilton bearing the poles and wires of said company.

VI.

All of the farmers having stations outside of the town of Hamilton pay for all toll service into Sedro Woolley and intermediate points, rates according to the schedule of the respondent company on file with the Public Service Commission.

Opinion.

We know of no substantial reason why the patrons of the respondent company living in Hamilton should have free toll service to Sedro Woolley and intermediate points while those patrons living immediately outside of the town of Hamilton should pay a toll charge. There might be some reason for granting the patrons of the respondent company in Hamilton some free service within the town, but when the people of that town ask a service which extends beyond the limits of Hamilton we believe that they are trying to establish a policy which is in conflict with the best interests of the state. We also deem it a discrimination for the company to charge the farmers outside of Hamilton for a toll service to Sedro Woolley and intermediate points while no charge is made for a like service to the patrons of respondent

ent company living within the town limits of Hamilton and this discrimination must at once be eliminated.

Order.

Wherefore, It Is Ordered, That the respondent company forthwith eliminate all free tolls to the patrons of said company within the town of Hamilton to Sedro Woolley and intermediate points and that the patrons of said company within the town of Hamilton have rates relative with all other patrons of said respondent company according to fixed schedules of said company filed or to be filed with this Commission.

Witness, The Public Service Commission of Washington, this 24th day of June, 1919.

No. 4698.

Florence-Rae Lumber, Land and Development Company, Complainant, v. Northwest Telephone Company, Respondent.

The complaint alleged discrimination in the matter of service. Disposition was as follows:

This matter coming on for hearing before the Commission this 7th day of July, 1919, and it appearing to the Commission after due consideration that the respondent, the Northwest Telephone Company, is a class "C" company and thereby comes directly under the supervision and jurisdiction of the postmaster general, and it appearing further that the Commission is without jurisdiction and is unable to secure the consent of the postmaster general to submit himself to its jurisdiction,

It Is Therefore Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 7th day of July, 1919.

No. 4763.

The Public Service Commission of Washington, ex rel. W. G. Parkes and Thirty Others, Complainants, v. Washington Coast Utilities, Respondent.

This was a protest against a proposed increase in telephone rates on Vashon Island, Washington. Disposition was as follows:

This matter coming on for hearing before the Commission this 24th day of July, 1919, and it appearing to the Commission after due consideration that the respondent, the Washington Coast Utilities, in so far as the telephone system owned by it is concerned, comes directly under the supervision and jurisdiction of the postmaster general, and it appearing further that the Commission is without jurisdiction and is unable to secure the consent of the postmaster general to submit himself to its jurisdiction,

It Is Therefore Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 24th day of July, 1919.

No. 4806.

**The Public Service Commission of Washington, ex rel. Leroy L. Todd, et al.,
Complainants, v. Benton Independent Telephone Company, Respondent.**

Petition invoking the aid of the Commission to compel a connection of the telephone lines of the Sunnyside Irrigation District and respondent. Disposition was as follows:

This matter coming on for hearing before the Commission this 24th day of July, and it appearing to the Commission that this case involves a physical connection between the Sunnyside Irrigation District, a municipal corporation, and the telephone system of the respondent: From the foregoing it would appear that one of the parties to this case is, or represents, a municipal corporation, over which the Commission has no jurisdiction, and it further appearing from a recent ruling of the United States supreme court, the postmaster general has jurisdiction over telephone matters and the Commission being unable to secure the consent of the postmaster general to submit himself to its jurisdiction,

It Is Therefore Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 24th day of July, 1919.

No. 4826.

**In the Matter of the Petition of Citizens of Spokane County, Washington,
for an Order to Rescind Rates of the Home Telephone & Telegraph
Company of Spokane, Washington.**

The nature of the proceeding is set forth in the caption. Disposition was as follows:

This cause coming on for hearing before the Commission, and it appearing to the Commission that from a decision of the United States supreme court of recent date, the postmaster general has full jurisdiction as to rates in all telephone cases, and it appearing further that the Commission is without jurisdiction and is unable to secure the consent of the postmaster general to submit himself to its jurisdiction,

It Is Therefore Ordered, That this cause be, and the same is, hereby dismissed.

Witness, The Public Service Commission of Washington, this 31st day of July, 1919.

No. 4715.

**Snohomish Commercial Club, Complainant, v. Puget Sound Telephone
Company, Respondent.**

The complaint protested a proposed increase in telephone rates. Disposition was as follows:

This matter coming on for consideration by the Commission on this 5th day of August, 1919,

It Is Ordered, That this case be, and the same is, hereby dismissed without prejudice, for the reason that the rates complained of do not now exist,

and for the further reason that the Commission is about to make a valuation of the respondent company for the purpose of fixing a rate base.

Witness, The Public Service Commission of Washington, this 5th day of August, 1919.

No. 4654.

C. M. Williams, et al., Complainants, v. Puget Sound Telephone Company, Respondent.

The complaint alleged that the rates charged for telephone service in the city of Everett were "unjust, unreasonable and excessive." Disposition was as follows:

This matter coming on for consideration by the Commission on this 5th day of August, 1919,

It Is Ordered, That this case be, and the same is, hereby dismissed without prejudice, for the reason that the rates complained of do not now exist, and for the further reason that the Commission is about to make a valuation of the respondent company for the purpose of fixing a rate base.

Witness, The Public Service Commission of Washington, this 5th day of August, 1919.

No. 1741.

The Public Service Commission of Washington, ex rel. E. Weimann, Complainant, v. Richmond Beach Telephone and Power Company, Respondent.

No. 1807.

The Public Service Commission of Washington, Complainant, v. Richmond Beach Telephone and Power Company, and Pacific Telephone and Telegraph Company, Respondents.

The complaint in cause 1741 alleged the unreasonableness of the toll rates charged by respondent. Cause 1807 was a valuation proceeding undertaken as a necessary preliminary to a correct determination of No. 1741. Disposition was as follows:

This cause coming on to be heard before the Commission this 6th day of August, 1919, and it appearing to the Commission that the parties challenging the rate have failed to prosecute the action; and the Commission having made an appraisal of the property of the respondent company, and no good reason existing why a rate base at this time should be fixed,

It Is Ordered, That the above entitled causes be, and the same are, hereby dismissed without prejudice, and that the appraisal and all data thereon be preserved for use in any subsequent pertinent proceeding.

Witness, The Public Service Commission of Washington, this 6th day of August, 1919.

No. 4866.

The Public Service Commission of Washington, Complainant, v. Northwest Telephone Company, a Corporation, and Florence-Rae Lumber, Land and Development Company, a Corporation, Respondents.

The nature of the cause is fully set forth in the following opinion:

This case arises over a controversy between two small telephone systems operating principally in Snohomish county, State of Washington.

The Florence-Rae Lumber, Land & Development Company, a corporation, operates a telephone line through Startup, Gold Bar, Index and Haybrook, with service line extending to the Sunset copper mine and to the Index-Galena Lumber Company. This company started its telephone system about ten years ago and is the pioneer company in this field. Sometime later the Northwest Telephone Company, a corporation, built a line paralleling that of the Florence-Rae Lumber, Land & Development Company through Startup, Gold Bar and Index and built extensions to other points, one extending to Skykomish.

The predecessors of the two companies entered into a contract on March 17, 1919, providing for a physical connection of the two systems at Startup. Later this point was changed by mutual consent to Gold Bar. A controversy subsequently arose between the companies over disputed accounts. The Northwest Telephone Company, undertaking to avail itself of certain provisions in the contract, notified the Florence-Rae Lumber, Land & Development Company that the contract was rescinded and cancelled and proceeded to sever the connections between the two systems. Such connection has since been restored pending the result of this controversy, under stipulation.

The Northwest Telephone Company maintains physical connections with other companies affording the transfer of messages over long distance lines through Everett, Washington.

Each of these companies serves certain communities not reached by the lines of the other and in order to give satisfactory and efficient service to the patrons of both companies, it is essential that physical connection between the systems be established and maintained.

Section 8626-45 of Remington & Ballinger's Annotated Codes and Statutes of Washington, reads as follows:

Every telephone company or telegraph company operating in this state shall receive, transmit and deliver without discrimination or delay the messages of any other telephone or telegraph company.

Section 8626-73 of the same code gives the Commission power to require such connection to be made whenever the lines of two or more companies form a continuous line of communication or could be made to do so by the construction and maintenance of suitable connections for the transfer of messages or conversations at common points between different localities which are not reached by the line of either company alone.

The contact between the two systems was first established at Startup pursuant to the contract heretofore referred to.

We think it is well settled by the courts that a contract providing for physical connection between two public utilities cannot be rescinded by one of the utilities alone or even by the joint action of both when such rescision

and the consequent severance of physical connection would be to the inconvenience and detriment of public service. Where the public interest is not affected, such an arrangement could perhaps be terminated by either company upon the violation of the contract by the other. *Campbellsville Telephone Co. vs. Lebanon Telephone Co.*, 80 S. W. 1115, 84 S. W. 518.

Our own supreme court in the *Skagit River Telephone case*, 85 Wash. 29-45, states:

We are satisfied from a careful examination of the authorities that the following are correct conclusions as to the law; * * * (2) That when one telephone company has opened its lines to physical connection and services for another telephone company upon certain terms, it can be required, as a state regulation within the police power, to afford the same facilities, convenience and uses to another or other telephone companies upon equal terms.

It appears from the evidence that the Northwest Telephone Company maintains a physical connection with the Puget Sound Telephone Company and with that company renders joint service. It should, therefore, continue joint service with the Florence-Rae Lumber, Land & Development Company. When physical connection between two systems has been established, they become, in a sense, a joint common carrier and the public has such an interest therein that neither utility can voluntarily withdraw therefrom to the injury of the service. The changing of the point of contact from Startup to Gold Bar, not being detrimental to the public interest, is unobjectionable. The testimony shows that satisfactory service has been and can be rendered by connection at Gold Bar. Were it not for this change by mutual consent of both companies, we would be inclined to require physical connection at Startup which is the first point of contact between the pioneer company and the company later in the field. It seems to be a recognized principle in cases involving physical connection between utilities that where the public can be conveniently served, connection will be ordered at the first point of contact of the new company with the old. Such a rule affords the pioneer company a larger use of its system and facilities. Any other rule would tend to encourage the useless paralleling of lines.

It is not to the interest of the public to encourage duplication in a field already sufficiently served, under the present system of Commission regulation, which practically eliminates the element of competition. In view of the fact, however, that the point of contact was changed by mutual agreement from Startup to Gold Bar, we have ordered that it be continued at that point and that the two companies establish joint rates and agree upon a division thereof.

Witness, The Public Service Commission of Washington, this 1st day of October, 1919.

The findings of fact and order were as follows:

I.

The Florence-Rae Lumber, Land & Development Company is a corporation organized, existing and acting under and by virtue of the laws of the State of Washington, and, at all times herein mentioned was and now is engaged in operating a telephone system extending through Startup, Gold Bar, Index and Haybrook in Snohomish county, State of Washington; and also operates a service line to the Sunset copper mine and the Index-Galena

Lumber Company, the main line being about fourteen miles in length and having about thirty telephones.

II.

The Northwest Telephone Company is a corporation organized, existing and acting under and by virtue of the laws of the State of Washington, and is operating a telephone system with lines through Sultan, Startup, Gold Bar, Baring, Grotto, Berlin, Skykomish and other points. The lines of the said Northwest Telephone Company parallel the lines of the Florence-Rae Lumber, Land & Development Company through Startup and Gold Bar.

III.

The said Florence-Rae Lumber, Land & Development Company is a pioneer company, being first to operate in Startup, Gold Bar and Index, said line having been constructed about ten years prior hereto.

IV.

That the said Northwest Telephone Company maintains physical connections with telephone companies other than the said Florence-Rae Lumber, Land & Development Company; that each of the said respondent companies serves communities not reached by the other; that it is necessary for the convenience of the public and for efficient service to the patrons of both companies that a physical connection be maintained between said two companies. The predecessors of the two respondent companies entered into a contract March 17, 1909, providing for a physical connection of the two systems at Startup, which contract was subsequently modified by mutual agreement so as to change the point of contact to Gold Bar, and that such change did not render the service to the public less convenient or efficient.

V.

That prior to the institution of these proceedings the Northwest Telephone Company sought to cancel such contract as an entirety and severed connection with the Florence-Rae Lumber, Land & Development Company; that such attempted cancellation was illegal, discriminatory and contrary to the public interest and void.

VI.

That subsequent to such attempted cancellation of said contract, physical connection was reestablished between said two companies at Gold Bar under a stipulation that the resumption of such contact should not be prejudicial to the interests of said Northwest Telephone Company.

VII.

That such contact at Gold Bar affords a physical connection between said two systems, which gives the public adequate and efficient service; and that the public necessities and conveniences will be subserved by having such connection continued.

VIII.

That the lines of the said two telephone companies form a continuous line of communication by the maintenance of suitable connection for the transfer of messages and conversations at a common point between different localities which are not reached by the line of either company alone; and

that such connection can reasonably be made and continued at Gold Bar and efficient service obtained thereby; and that a public necessity exists for such physical connection.

Order.

From the foregoing findings of fact, the Commission orders that the said Northwest Telephone Company, a corporation, and the Florence-Rae Lumber, Land & Development Company, a corporation, maintain physical connection of their systems at Gold Bar, Snohomish county, Washington, for the transfer of messages and conversations; and that said two companies proceed to establish joint rates or charges for service by and over said lines and file tariffs therefor with this Commission; and the said companies are each and both hereby directed to agree upon a division of such joint rates and this Commission retains jurisdiction of this proceeding for the purpose of prescribing such joint rates and charges to be made, used, observed and enforced in the future and of determining the division thereof between said two companies in case of failure or inability of said companies to agree upon such division and such rates; that said companies shall file with this Commission proper tariffs establishing such joint rates within fifteen days from the date of this order.

Witness, The Public Service Commission of Washington, this 30th day of September, 1919.

The cause is still pending on writ of review to the superior court of Thurston county.

No. 4902.

The Public Service Commission of Washington, and the City of Seattle, a Municipal Corporation, Complainants, v. The Pacific Telephone and Telegraph Company, Respondent.

In this matter the Public Service Commission of Washington and the city of Seattle have by formal complaints challenged the sufficiency of the service of the Pacific Telephone and Telegraph Company in the city of Seattle. The order entered herein was as follows:

The material allegations of the complaints of both the Commission and the city were: That the respondent in the conduct of its business has failed to provide adequate, efficient, proper or sufficient service, and that the practices of the said respondent, in so far as they relate to the rendition of service were unjust, unreasonable and improper. That there is an habitual unreasonable delay in the installation of telephones to the patrons, and that the operators, either by inefficiency or inattention to duty are unreasonably slow in answering calls and making proper connections; and that conversations of patrons are frequently interrupted by being disconnected at the improper time; and that the service is further inefficient in that either through inadequate or inefficient facilities, or through the fault of the operators, the party making the call is connected with the wrong number; and that the respondent company has refused to install telephones for patrons entitled to service.

This cause was regularly noticed for hearing on October 6, 1919, upon which day the entire Commission being present and all parties being represented by counsel, the matter came on for hearing.

Immediately upon the opening of the hearing the respondent company through its counsel stated that it admitted the truth and sufficiency of all of the foregoing allegations contained in the complaints of the complainants, that is, that its service was not sufficient and such as should be given in the city of Seattle.

The respondent thereupon proceeded to show what it proposed to do to remedy the matters complained of, and did show, that in addition to the proposed expenditure of between one and three million dollars in the construction of new exchange buildings, the laying of cables, and the purchase of new central office equipment and other permanent improvements, including the installation of the latest type of automatic telephones, that it could and would within the period of sixty days satisfactorily take care of and dispose of all orders for telephone installations, removals, etc., and that the force of telephone operators would be brought to a normal standard, so that at the end of that sixty-day period it would be giving as good and efficient service in all its branches as had prevailed prior to the war period and government control.

The Commission and the city also introduced detailed evidence of investigations made by their experts concerning the charges contained in the complaints.

Without at this time making formal findings, and retaining its jurisdiction of this cause, the Commission makes the following

Order.

I.

That this cause be continued for the period of sixty days, that is, until the 5th day of December, 1919.

II.

That in the meantime the company proceed with due diligence to carry out the program set forth by its engineer at the hearing before this Commission.

III.

That during the sixty-day period of continuance the respondent company, the Pacific Telephone and Telegraph Company, render to the Commission every fourteen (14) days a detailed statement, showing:

(a) The number of telephone operators employed as compared with the number employed at the time of the hearing.

(b) The number of orders for new installations, for removals and for other service on hand at the close of each day's business, segregated as between those pending at this time, and orders received subsequent to this time, giving the number disposed of daily, the number remaining undisposed of daily, and the number of new orders received daily.

(c) A bi-monthly report of the progress made on each item of construction in the company's proposed program, showing in detail the expenditures, the new property purchased or installed, and the amounts paid therefor, and the general status of each unit embraced in their program.

Witness, The Public Service Commission of Washington, at Olympia, Washington, this 7th day of October, 1919.

This cause is still pending before the Commission.

ORDERS IN CASES AFFECTING GAS COMPANIES.

No. 4665.

Aberdeen Central Labor Council, Complainant, v. North Pacific Public Service Company, Respondent.

Respondent filed with the Commission its tariff providing for increased gas rates effective July 1, 1918. Complainant filed its protest June 24, 1918. An investigation was made, and a hearing held at Aberdeen, Washington, July 23, 1918, resulting in the following

Findings of Fact.

I.

That the North Pacific Public Service Company is engaged in the cities of Aberdeen and Hoquiam in the State of Washington in the manufacture, distribution and sale of gas for light and heating purposes, and as such is subject to the jurisdiction of the Public Service Commission of the State of Washington.

II.

That for a long time on and prior to July 1, 1918, the North Pacific Public Service Company and its predecessor, the Grays Harbor Gas Company, were selling gas to its patrons in Aberdeen and Hoquiam at the following rates, to-wit:

0 to 300 cubic feet.....	\$0.50
400 to 1,000 cubic feet.....	1.60 net
1,100 to 5,000 cubic feet.....	1.40 net
5,100 to 10,000 cubic feet.....	1.30 net
10,100 to 15,000 cubic feet.....	1.20 net
Over 15,000 cubic feet.....	1.10 net

III.

That on June 1, 1918, the North Pacific Public Service Company issued its tariff No. 3, cancelling its tariff No. 2, to become effective July 1, 1918, with the following rates:

0 cu. ft.....	\$0.75 per customer
100 cu. ft.....	.75 per customer
200 cu. ft.....	.75 per customer
300 cu. ft.....	.75 per customer
400 cu. ft.....	.80 per customer
500 cu. ft.....	.90 per customer
600 cu. ft.....	1.10 per customer
700 cu. ft.....	1.25 per customer
800 cu. ft.....	1.40 per customer
900 cu. ft.....	1.55 per customer
1,000 cu. ft.....	1.70 per customer
Next 4,000 cu. ft.....	1.55 per M. net
Next 5,000 cu. ft.....	1.45 per M. net
Next 5,000 cu. ft.....	1.35 per M. net
All over 15,000 cu. ft.....	.90 per M. net

IV.

That on June 5, 1918, the Public Service Commission of the State of Washington addressed a communication to the Hoquiam Commercial Club,

the Aberdeen Commercial Club, the honorable mayor of Aberdeen and the honorable mayor of Hoquiam, calling their attention to the proposed increases in the gas rates of their respective communities.

V.

That under date of June 22, 1918, the Public Service Commission received a communication from the secretary of the Aberdeen Chamber of Commerce, notifying the Commission that the Chamber of Commerce of Aberdeen would not protest the proposed increase of rates.

VI.

That under date of June 19, 1918, the Aberdeen Central Labor Council, through its secretary, notified the Public Service Commission that the Aberdeen Central Labor Council, representing twenty-nine organizations, with a membership of about 3,000, wished to enter a protest against the raise of gas rates in Aberdeen.

VII.

That under date of June 26, 1918, the Public Service Commission entered the following order, to-wit:

The above named respondent having filed a schedule of increased gas rates to become effective July 1, 1918, and the above named complainant having filed a protest against the proposed increases and the Commission not having sufficient time in which to make a general survey of the property of the respondent company and determine its operating revenues and expenses,

It is ordered that said rates may become provisionally effective as of date July 1, 1918, pending investigation as to the reasonableness thereof by the Commission, the burden of proof as to their reasonableness to be and remain upon the respondent company and that the protest of the complainants be heard in the city of Aberdeen at the Commercial Club rooms on July 23, 1918, at the hour of 9:00 o'clock a. m.

Witness, The Public Service Commission of Washington this 26th day of June, 1918.

VIII.

Through its engineering department, the Public Service Commission caused a general survey of the property of the North Pacific Public Service Company used and useful in the manufacture, distribution and sale of gas in the cities of Aberdeen and Hoquiam, and also an examination of the business of said company, which survey and examination shows as follows:

COST OF PROPERTY.

	1905	1906	1907	1908
Construction account	\$12,794 88	\$1,462 93	\$893 13	.....
Engineering and superintendence .....	.....	.....	13,571 27	.....
Lands	1,713 11	762 30	1,000 00	.....
Buildings, fixtures and grounds.. ..	.....	.....	.....	.....
Works apparatus .....	.....	.....	1,235 66	5,577 55
Mains	9,677 35	2,026 31	2,597 34	1,952 88
Holders .....	.....	.....	18,016 90	.....
Services	689 15	921 97	3,520 17	2,889 55
Meters and regulators.....	1,373 89	2,504 33	2,037 59	2,223 50
Furniture and fixtures.....	272 97	168 58	219 75	127 95
Tools and implements.....	443 26	236 28	204 97	235 10
Totals	\$26,964 61	\$8,082 70	\$43,296 78	\$13,006 53
Cumulative totals .....	.....	\$35,047 31	\$78,344 09	\$91,350 62

	1909	1910	1911	1912
Lands .....	.....	\$1,540 98	\$4,007 49	\$526 33
Works apparatus	\$11,237 71	7,378 14	14,941 17	944 05
Mains	10,791 90	6,615 40	5,387 98	4,305 37
Services	5,209 21	5,786 99	5,104 97	6,104 73
Meters and regulators.....	2,366 19	2,559 73	2,847 63	930 61
Lamps and lamp equipment.....	.....	6,944 44	2,793 27	3,298 45
Miscellaneous equipment .....	.....	125 00*	112 00*	753 37*
Furniture and fixtures.....	156 15	69 00	334 45	738 93
Tools and implements.....	149 59	171 13	112 98	114 46
Hoquiam street lights.....	.....	.....	1,049 60	24 00
Organization and franchise.....	9,600 00	.....	.....	.....
Totals	\$39,510 75	\$30,940 81	\$36,467 54	\$16,233 56
Cumulative totals	\$130,861 37	\$161,802 18	\$198,269 72	\$214,503 28

* Indicates red figures.

	1913	1914	1915	1916
Lands	\$1,693 02	.....	\$30 50	.....
Buildings, fixtures and grounds..	140 66	\$738 20	107 73	\$1,296 20
Works apparatus	114 71	295 27	110 87	.....
Mains	7,064 23	3,292 89	1,995 24	1,707 62
Services	6,199 31	3,942 68	2,322 48	2,634 05
Meters and regulators.....	2,553 98	1,829 10	430 45	622 24
Lamps and lamp equipment.....	493 44	399 87	33 98	13 80
Utility equipment	40 00	87 08	47 00	28 00
Furniture and fixtures.....	28 50	292 30	.....	.....
Tools and implements.....	285 03	45 15	37 23	9 00
Ammonia plant	3,840 00	27 58	59 02	.....
Organization and franchise.....	100 00	.....	.....	.....
Industrial insurance .....	.....	.....	.....	63 84
Totals	\$22,552 88	\$10,950 12	\$5,174 50	\$6,374 75
Cumulative totals	\$237,056 16	\$248,006 28	\$253,180 78	\$259,555 53
Hagenah's appraisal June 30, '13..	\$263,226 00	.....	.....	.....
Additions July-December, 1913...	7,416 53	.....	.....	.....
Totals	\$270,642 53	\$281,592 65	\$286,767 15	\$293,141 90

	1917	To May 31, 1918	Total
Construction account			\$15,150 94
Engineering and superintendence.....			13,571 27
Lands			11,273 73
Buildings, fixtures and grounds.....	\$182 36	\$6 00	2,471 15
Works apparatus	38 45		41,873 58
Mains	2,463 26	366 42	60,244 19
Holders			18,016 90
Services	2,445 05	599 12	48,369 43
Meters and regulators.....	582 97	22 17	22,884 38
Lamps and lamp equipment.....			13,977 25
Utility equipment		447 29	649 37
Miscellaneous equipment	32 24		958 13*
Furniture and fixtures.....	18 70	95 00	2,522 28
Tools and implements.....		2 35	2,046 53
Hoquiam street lights.....			1,073 60
Ammonia plant			3,926 60
Organization and franchise.....			9,700 00
Industrial insurance	75 81	15 49	155 14
Totals	\$5,838 84	\$1,553 84	\$266,948 21
Cumulative totals	\$265,394 37	\$266,948 21	.....
Hagenah's appraisal June 30, 1913.....			.....
Additions July-December, 1913.....			.....
Totals	\$298,980 74	\$300,534 58	.....

* Indicates red figures.

IX.

INCOME STATEMENT.

	1913	1914	1915	1916	1917	Jan. 1st to May 31st 1918
OPERATING INCOME—						
Gas operating revenue.....	\$51,139 22	\$59,872 09	\$50,122 62	\$49,399 35	\$48,133 74	\$23,773 62
Gas operating expense.....	44,030 24	43,568 93	35,994 17	38,013 68	44,008 43	24,900 65
Operating income	\$17,108 98	\$16,303 16	\$14,128 45	\$11,385 67	\$4,125 31	\$1,187 04*
NON-OPERATING INCOME—						
Non-operating revenue	\$4,152 30	\$4,431 61	\$3,018 56	\$2,563 79	\$1,463 23	\$1,921 17
Total non-operating revenue.....	\$4,152 30	\$4,431 61	\$3,018 56	\$2,563 79	\$1,463 23	\$1,921 17
Gross income	\$21,261 28	\$17,734 77	\$17,147 01	\$13,949 46	\$5,588 54	\$734 13
DEDUCTIONS—						
Profit on merchandise sales.....	\$856 39	\$756 83	\$737 41	\$646 19	\$236 73*	\$1,295 81
Taxes	3,696 78	3,875 00	4,128 80	3,077 99	4,619 53	1,925 00
Depreciation, 3.5%	7,902 27	8,488 59	8,770 77	8,972 89	9,186 62	3,881 66
Total deductions	\$12,455 44	\$13,120 42	\$13,686 98	\$12,697 07	\$13,519 47	\$7,102 47
Amount earned	\$9,805 84	\$4,614 35	\$3,460 03	\$1,252 39	\$7,830 93*	\$6,368 34†
Average plant value.....	\$225,779 12	\$242,531 22	\$250,593 53	\$254,363 15	\$262,474 95	\$266,171 29
Per cent. earned.....	4.34	1.90	1.38	0.49	3.02*	.....

* Indicates red figures.

† \$6,368.34 loss for 5 months, or average less of \$1,273.67 for one month, or loss for year of \$15,234.04.

X.

As prognosticating the results of the proposed over, the rates being charged, the engineer of the Commission set up the following table:

OPERATING REVENUE IN CENTS PER M. CU. FT. OF GAS SOLD.

	1913	1914	1915	1916	1917	5 Months 1918
OPERATING REVENUE—						
Commercial heat and light, metered.....	\$1.202	\$1.124	\$1.090	\$1.120	\$1.097	\$1.060
Commercial heat and light, flat rate.....	.002	.001				
Commercial heat and light, prepaid.....	.277	.275	.280	.291	.313	.347
Municipal street lighting.....	.060	.061	.064	.040	.040	.033
Municipal building heat and lighting.....	.029	.020	.022	.022	.020	.020
Miscellaneous .....	.011	.005	.016	.044		.005
Total operating revenue.....	\$1.571	\$1.476	\$1.432	\$1.517	\$1.470	\$1.465
NON-OPERATING REVENUE—						
Rents from arc lamps and appliances.....	\$0.075	\$0.072	\$0.064	\$0.058	\$0.049	\$0.037
Profit on merchandise sales.....	.022	.020	.023	.020	.009*	.079
Rent from real estate and buildings.....		.001	.001			
Miscellaneous non-operating revenue.....	.008	.022			.004	.001
Total non-operating revenue.....	\$0.105	\$0.115	\$0.088	\$0.078	\$0.044	\$0.117
Total revenue	\$1.676	\$1.591	\$1.550	\$1.596	\$1.514	\$1.583
Less discounts and adjustments.....	.002	.007	.010	.011	.022	.021
Gross revenue	\$1.674	\$1.584	\$1.540	\$1.584	\$1.492	\$1.561

OPERATING EXPENSES IN CENTS PER M. CU. FT. OF GAS MADE.

	1913	1914	1915	1916	1917	5 Months 1918
PRODUCTION—						
Operating labor	\$0.1386	\$0.1356	\$0.1255	\$0.1415	\$0.1656	\$0.1939
Coal carbonized .....	.3088	.4277	.4017	.3943	.4816	.6490
Bench fuel .....	.0787	.0920	.0886	.0727	.0818	.0874
Boiler fuel .....	.0615	.0569	.0603	.0491	.0674	.0708
Purifying material .....	.0129	.0051	.....	.0006	.0053	.0076
Miscellaneous supplies and expenses .....	.0833	.0210	.0153	.0222	.0208	.0229
Residual expense .....	.0179	.0383	.0881	.0294	.0282	.0552
Totals	\$0.7288	\$0.7776	\$0.7229	\$0.7068	\$0.8702	\$1.0946
Residuals produced .....	.2860	.3057	.3209	.3150	.3633	.4288
Net production expense	\$0.4408	\$0.4719	\$0.4020	\$0.3918	\$0.5069	\$0.6658
Maintenance gas works and apparatus .....	.0837	.0423	.0354	.0850	.0249	.0887
Maintenance gas works, buildings, fixtures and grounds .....	.0045	.0008	.0011	.....	.0110	.0046
Total production expense	\$0.4791	\$0.5149	\$0.4385	\$0.4269	\$0.5428	\$0.7061
DISTRIBUTION—						
Superintendence	\$0.0160	\$0.0121	\$0.0123	\$0.0000	\$0.0072	\$0.0118
Patrolling and inspecting mains .....	.0007	.0030	.0024	.0077	.0117	.0022
Services .....	.0001	.....	.....	.0003	.....	.0017
Meters and regulators .....	.0644	.0832	.0244	.0217	.0192	.0244
Miscellaneous supplies and expenses .....	.0129	.0157	.0152	.0193	.0228	.0141
Maintenance mains .....	.0155	.0252	.0157	.0290	.0328	.0204
Maintenance services .....	.0167	.0141	.0078	.0155	.0211	.0176
Maintenance meters and regulators .....	.0217	.0178	.0139	.0044	.0158	.0460
Maintenance miscellaneous equipment .....	.0001	.0002	.....	.....	.....	.....
Total distribution	\$0.1181	\$0.1199	\$0.0917	\$0.1089	\$1.1306	\$0.1362

OPERATING EXPENSES IN CENTS PER M. CU. FT. OF GAS SOLD.

	1913	1914	1915	1916	1917	5 Months 1918
UTILIZATION—						
Commercial arc lamps.....	\$0.1014	\$0.0741	\$0.0724	\$0.0809	\$0.0585	\$0.0552
Municipal arc lamps.....	.0086	.0103	.0071	.0082	.0105	.0107
Consumers' installations.....	.0282	.0194	.0171	.0211	.0282	.0154
Maintenance municipal arc lamps.....						
Maintenance commercial arc lamps.....	.0017	.0002			.0002	
Total utilization expense.....	\$0.1849	\$0.1045	\$0.0986	\$0.1102	\$0.0953	\$0.0813
COMMERCIAL—						
Commercial expense	\$0.0851	\$0.1111	\$0.1045	\$0.1117	\$0.1189	\$0.1359
GENERAL—						
Salaries and expenses, general officers.....	\$0.0482	\$0.0462	\$0.0520	\$0.0799	\$0.0949	\$0.0755
Salaries and expenses, general officers' clerks.....	.0412	.0432	.0464	.0691	.0505	.0647
Printing and stationery.....	.0085	.0046	.0035	.0100	.0084	.0071
General office expense.....	.0731	.0806	.0700	.0763	.0688	.0698
Law expense and damages.....	.0131	.0093	.0023	.0052	.0021	.0015
Insurance .....	.0024	.0070	.0068	.0142	.0082	.0078
Store expense .....	.0014	.0007			.0003	
Miscellaneous expense, general.....						
Total general expense.....	\$0.1879	\$0.1716	\$0.1811	\$0.2450	\$0.2312	\$0.2312
Total operating expenses.....	\$1.119	\$1.1258	\$1.0435	\$1.1596	\$1.3246	\$1.5161

XI.

As indicating the increased cost of manufacturing gas by the North Pacific Public Service Company, and the influence upon the net earnings of the company, the engineer of the Public Service Commission set up the following table from data taken from the books of the company, covering 1917 and five months of 1918:

	REVENUES		EXPENSES		NET EARNINGS		Per Cent. Expenses to Revenues	Gas Sales	Cubic Feet Gas Made per Pound of Coal	Pounds of Coke Made per Ton of Coal Carbonized
	Dollars	Per M. Cu. Ft. Sold	Dollars	Per M. Cu. Ft. Sold	Dollars	Per M. Cu. Ft. Sold				
1917										
January.....	\$4,525 52	\$1.4339	\$3,276 86	\$1.0779	\$1,249 16	\$0.4110	72.3	3,039,600	5.00	1,240
February.....	4,011 78	1.5060	3,040 79	1.1408	970 99	.3642	76.0	2,665,600	4.98	1,285
March.....	4,485 01	1.4381	3,237 18	1.0741	1,247 83	.4140	70.0	3,013,900	5.06	1,234
April.....	3,801 45	1.5269	3,015 60	1.2113	785 85	.3166	78.8	2,439,600	4.96	1,300
May.....	3,802 83	1.5949	3,244 51	1.3853	567 82	.2296	85.5	2,429,700	5.23	1,234
June.....	4,065 58	1.5977	3,748 11	1.4766	307 47	.1211	93.5	2,538,300	5.20	1,300
July.....	3,995 23	1.5390	3,816 53	1.4702	178 70	.0688	96.4	2,596,000	5.25	1,300
August.....	4,416 02	1.5498	4,039 58	1.4168	376 44	.1320	91.6	2,851,200	5.69	1,300
September.....	4,167 18	1.5408	3,462 50	1.2768	704 68	.2905	88.3†	2,765,500	5.13	1,290
October.....	4,463 49	1.5368	3,917 54	1.3488	545 95	.1880	88.0	2,904,400	5.35	1,300
November.....	4,340 51	1.5263	4,066 90	1.4266	283 61	.0997	93.5	2,843,200	5.06	1,300
December.....	4,729 92	1.5041	5,200 83	1.6538	470 91*	.1497*	110.0	3,144,700	5.76	1,350
1918										
January.....	5,950 22	1.4965	5,330 78	1.3898	619 44	.1556	89.7	3,981,458	5.49	1,309
February.....	4,640 23	1.5207	4,645 64	1.5224	5 35*	.0017*	100.1	3,051,372	5.39	1,300
March.....	4,927 23	1.6257	5,014 26	1.6544	87 03*	.0287*	101.5	3,030,833	5.26	1,289
April.....	5,023 50	1.5550	4,724 71	1.4625	298 79	.0925	94.2	3,230,503	5.46	1,293
May.....	5,251 88	1.6563	5,281 27	1.6893	9 39*	.0030*	100.1	3,170,964	5.54	1,101

* Indicates red figures.

† Indicates price of coal went into e ect.

‡ Reduced maintenance.

XII.

Grouping the gas consumers for the North Pacific Public Service Company into classes based upon the amount of gas consumed and showing other information from data taken from the books of the company, the Commission's engineer produced the following table:

PRESENT SCHEDULE.

Range of Average Monthly Consumption of Consumers in Group (Cubic Feet)	Actual Average Consumption per Consumer per Month Through-out Year (Cubic Feet)	Total Net Charge per Consumer per Month	Number of Consumers in Group	Total Net Income per Month	Average Net Charge per M. Cu. Ft. Sold
0 to 300	206	\$0.50	535.75	\$267 87	\$2.4083
400	400	.64	125.42	80 26	1.6000
500	500	.80	169.00	135 20	1.6000
600	600	.96	139.92	134 32	1.6000
700	700	1.12	93.50	104 72	1.6000
800	800	1.28	109.25	139 84	1.6000
900	900	1.44	73.92	106 44	1.6000
1,000	1,000	1.60	83.92	142 27	1.6000
1,000 to 1,500	1,274	1.98	233.33	471 89	1.5545
1,600 to 2,000	1,782	2.69	135.17	363 61	1.5100
2,100 to 2,500	2,291	3.41	72.75	248 08	1.4883
2,600 to 3,000	2,788	4.10	52.00	213 20	1.4714
3,100 to 3,500	3,289	4.80	32.17	154 42	1.4598
3,600 to 4,000	3,813	5.55	22.67	125 82	1.4540
4,100 to 4,500	4,285	6.21	17.17	106 63	1.4463
4,600 to 5,000	4,805	6.92	13.25	91 09	1.4401
5,100 to 5,500	5,279	7.56	9.58	72 42	1.4314
5,600 to 6,000	5,963	8.45	8.83	74 61	1.4175
6,100 to 6,500	6,310	8.90	6.59	58 56	1.4096
6,600 to 7,000	6,761	9.49	3.17	30 08	1.4050
7,100 to 7,500	7,302	10.19	4.17	42 49	1.3965
7,600 to 8,000	7,781	10.80	4.50	48 60	1.3879
8,100 to 9,000	8,489	11.74	5.17	60 70	1.3840
9,100 to 10,000	9,453	13.00	4.75	61 75	1.3745
10,100 to 15,000	12,206	16.34	11.58	189 21	1.3383
Over 15,000	24,238	29.86	14.92	445 51	1.2319
Hoquiam street lights	98,350	110.00	1.00	110 00	1.1183
			1,993.44	\$4,080 19	

NOTE—\$4,080.19 x 12 equals \$48,962.28 equals annual revenue.

\$48,962.28 divided by 32,946.6 equals \$1.4861 per M. cu. ft. sold.

XIII.

Comparing 1918 costs of material and labor in the manufacture, distribution and sale of gas with the year of 1917 as applied to 1917 operations, the Commission's engineer reported as follows:

MATERIAL	Quantity	1917		PRESENT		Increase Over 1917
		Price	Amount	Price	Amount	
Gas coal	4,492.65 tons	\$4.7766	\$21,459 59	\$6.39*	\$28,708 08	\$7,248 44
Boiler Fuel— Coke	901.50 tons	4.014	3,618 62	5.50.	4,968 25	1,389 63
Bench Fuel— Coke	938.15 tons	4.014	3,745 66	5.50	5,182 33	1,896 67
Totals			\$28,823 87		\$38,798 61	\$9,974 74
Residuals Produced— Coke	2,788.615 tons	\$4.014	\$11,173 48	\$5.50	\$15,309 88	\$4,136 45
Tar	45,517 gallons	.0964	4,291 44	.14	6,232 38	1,940 94
Ammonia	20,980 pounds	.05	1,048 00	.05	1,048 00	.....
Totals			\$16,512 87		\$22,590 26	\$6,077 39
Net totals			\$12,810 90		\$16,208 85	\$3,897 45
Operating labor			18,607 23		25,560 00	6,952 77
Commercial and acct. labor			3,685 65		4,737 00	1,051 35
Taxes			4,619 58		4,620 00	42
Totals			\$39,223 36		\$51,125 35	\$11,901 99

* Does not include 25% freight rate increase effective June 25th.

XIV.

An examination of the books of the North Pacific Public Service Company for the months of July, August, September and October, 1917, shows an annual rate of return on the property used and useful in the manufacture, distribution and sale of gas to be 2.89 per cent loss. For the same months of the year 1918, being four months under the schedule of rates effective July 1, 1918, shows the company in the red to the amount of 2.56 per cent per annum.

Opinion.

In conference with some users of gas at Aberdeen and Hoquiam we informed them that we proposed to make a study of the incomes of those taking a thousand feet of gas or less, not alone in Aberdeen and Hoquiam but in the city of Spokane, where we had occasion to study the gas problem, that we might be advised as to whether the so-called minimum rate was an unjust burden upon the poor.

In rendering an opinion in the Spokane case we used the following language and tables:

The principal error, if we appreciate the situation, is set forth in the city's petition as follows:

"Finally the proposed new schedule is wrong in principle. It places an unjust burden upon the small consumer. There is concealed in the schedule a readiness-to-serve charge of 75c per consumer. A person using 500 cubic feet of gas—and there are hundreds of such in the city—pays \$2.50 per thousand feet for the gas consumed. Thousands using the largest amounts pay as low as 82

or 83 cents per thousand feet. There is by this schedule a direct tax of from three to six dollars per year laid upon the small consumer in the shape of a readiness-to-serve charge, for which he receives no benefit. It may be that from the necessities of the case, those persons of moderate means who live in small flats or rooms and in a modest way do their own cooking will pay this increase and will pay this charge for that which they do not receive. But the gross and the cruel injustice of the proposed scale to the person in ordinary circumstances of life, to the laborer, the mechanic, the artisan,—seems to us to be so plain that we feel that we would be derelict in our duty did we not call the attention of the commission to it."

This Commission would be derelict in its duty were it not solicitous of justice for all, as the very object of its creation was, that burdens should be fairly distributed and borne. Our viewpoint, however, may be different from the viewpoint of the representative of the city of Spokane. We believe the laborer, the clerk, the artisans following the manual arts, and in particular the girl who works in the store, in the telephone office or elsewhere, should be sufficiently remunerated for their services to enable them to make use of a common necessity such as gas. If there are any in Spokane that are being so underpaid that they cannot make use of such a common commodity, the fault does not lie with this Commission but there is another commission in this state whose functions should be exercised, and we question not its willingness to promptly act.

It is an easy matter to assume that a given class are discriminated against and there are always those who are willing to believe that their burdens are not fair, but it is neither assertion nor assumption that should control the acts and proceedings of this Commission, but facts, their analysis and probity.

After the city filed its petition for rehearing, that we might be further advised as to the reasonableness of the rates which we permitted the gas company in Spokane to charge, after the hearing, we caused a study to be made of the income of those in Spokane using a thousand cubic feet or less of gas per month, and from this study we copy into this opinion and order our analysis. The study in Spokane was carried on as follows: From the consumers' ledger were taken the names and addresses of those customers consuming a thousand cubic feet or less of gas per month. To those persons we addressed a communication as follows:

THE PUBLIC SERVICE COMMISSION OF WASHINGTON.

E. F. Blaine, Chairman.
Arthur A. Lewis.
Frank R. Spinnig.

J. H. Brown,
Secretary.

CONFIDENTIAL INFORMATION.

Olympia, July 15, 1918.

Mr.....

Dear Sir: You are a patron of the Spokane Falls Gas Light Company. That the Public Service Commission of the state may be properly advised in a study of gas rates in which it is now engaged in conjunction with the University of Washington, we would be pleased if you would supply the information requested in the blank below for our confidential use and mail same to us in the enclosed stamped envelope.

Yours very truly,
UNIVERSITY OF WASHINGTON.
THE PUBLIC SERVICE COMMISSION OF WASHINGTON.

(CONFIDENTIAL INQUIRY)

Character of use of gas.....
(Range, water heater, gas plate, etc.)
Occupation
What is your approximate annual income?.....
How many persons in your household?..... Adults..... Children.....

To reach all these patrons it was necessary for us to send out 2,200 letters, and 601 replies were received, from which our statistics were compiled, as follows:

SPOKANE GAS AND FUEL COMPANY.

Analysis of Wages of Consumers and Amount Paid for Gas in Quantities of Less Than 1,000 Cubic Feet from an Industrial Survey Made by the Public Service Commission of the State of Washington of the Patrons of the Above Company Under the Rates in Effect as of June 26, 1918, Being the Present Rates.

	Laborers	Artisans	Clerks	Teachers	Waitresses, Scantresses, Dressmakers	Housewives, Cooks, Etc.	Businessmen and Merchants	Professional Men	Traveling Salesmen
GAS PLATES—									
Average monthly wage.....	\$113 00	\$109 50	\$93 50	\$116 00	\$39 30	\$51 00	\$103 00	\$224 00	\$133 50
Average amount paid for gas monthly.....	\$1 25	\$1 31	\$1 36	\$1 25	\$1 72	\$1 13	\$1 37	\$1 26	\$1 25
Per cent. of average wage.....	1.11	1.20	1.41	1.03	4.40	1.46	0.81	0.43	0.90
Per cent. of total number tabulated.....	17.50	21.20	13.10	3.80	3.30	10.00	13.70	8.10	3.30
GAS RANGES—									
Average monthly wage.....	\$73 00	\$110 00	\$100 00	\$139 00	\$46 00	\$70 00	\$153 00	\$183 00	\$173 75
Average amount paid for gas monthly.....	\$1 40	\$1 35	\$1 43	\$1 35	\$1 39	\$1 24	\$1 37	\$1 33	\$1 35
Per cent. of average wage.....	1.92	1.23	1.43	0.97	3.03	1.91	0.87	0.74	0.75
Per cent. of total number tabulated.....	15.10	14.90	14.40	2.20	3.20	8.30	20.30	14.40	7.20
RECAPITULATION—									
Average monthly wage.....	\$39 25	\$110 00	\$93 50	\$127 50	\$43 00	\$70 25	\$160 50	\$207 00	\$160 50
Average amount paid for gas monthly.....	\$1 24	\$1 33	\$1 40	\$1 30	\$1 52	\$1 21	\$1 37	\$1 27	\$1 33
Per cent. of average wage.....	1.50	1.21	1.42	1.02	3.54	1.72	0.85	0.66	0.79
Per cent. of total number tabulated.....	15.90	17.10	15.70	2.90	3.40	8.90	13.10	12.20	5.90

AVERAGE OF ALL.

Average monthly wage..... \$123 50
 Amount paid for gas monthly..... \$1 34
 Per cent. of average wage..... 1.09

Under the term "Artisan" in the foregoing table we have included all those who are engaged in the manual arts, such as machinists, mechanics, carpenters, and skilled labor generally.

It is to be observed from the foregoing table that the waitresses, seamstresses and dressmakers only constitute 3.4 per cent of those furnishing us with data, and the teachers constitute but 2.8 per cent. It may be that the women have been less responsive to the inquiries of the Commission than those in other callings.

The laborers and artisans replying constitute 33 per cent, and the clerks, business men, and merchants and professional men constitute 46 per cent. While the laborers and artisans in any community exceed in number the professional men, business men and merchants, it is probable that a larger per cent of the professional, business men and merchants make use of gas than do laborers and artisans. Thus we deem their relationship as shown in the foregoing table to be fairly illustrative of the actual conditions governing gas consumption within the limit of one thousand cubic feet.

The average wage paid laborers in Spokane appears to be, according to our table, \$89.25 per month. These laborers, as an average, pay for gas—which includes the readiness-to-serve charge in whatever form it may be embodied in the rates—\$1.34. This constitutes only 1.5 per cent of their monthly earnings.

The artisans appear to be earning on an average \$110.00 per month. They consume on an average \$1.33 worth of gas. This sum constitutes 1.21 per cent of their monthly earnings.

The business men and merchants of Spokane earn an average of \$160.50 per month. They consume on an average \$1.37 worth of gas. This constitutes .85 of one per cent of their earnings.

The professional men earn \$207.00 per month on an average. They consume \$1.37 worth of gas each, per month, and this is .66 of one per cent of their monthly earnings.

The waitresses, seamstresses and dressmakers appear to be receiving only an average of \$43.00 per month. They pay out on an average \$1.52 for gas. This is 3.54 per cent of their monthly wage.

The serious question arises whether the waitresses, seamstresses and dressmakers as a class are actually receiving the wages to which they are entitled. We are not inclined to believe that the alleged overcharge for gas by the gas company is half as serious in their case as the underpay for their services.

We do not see in what manner we would be justified in changing the charges for gas up to the first thousand feet that these people might receive a lower gas rate, when 46 per cent of the patrons are professional men and business men and merchants who would share in the lower rate. We are sure that this would be a rank injustice to the laborers and the artisans who are making a monthly use of gas of more than one thousand feet.

When we compare in the foregoing table the percentage of the wages of the laborers, the artisans, clerks, teachers, professional men, business men, merchants and traveling salesmen paid for gas, and find that in no instance does it exceed 1.5 per cent of the monthly income of these persons, we are led to believe that the language used by the corporation counsel in

his petition for a rehearing, "But the gross and cruel injustice of the proposed scale to the person in ordinary circumstances of life, to the laborer, the mechanic, the artisan—seems to us so plain that we feel that we would be derelict in our duty did we not call the attention of the Commission to it," is but crass.

As in conjunction with the University of Washington we made a like study in the cities of Aberdeen and Hoquiam, with comparative results, we are inserting the table of our calculations in those cities:

NORTH PACIFIC PUBLIC SERVICE COMPANY, ABERDEEN AND HOQUIAM.

Analysis of Wages of Consumers and Amount Paid for Gas in Quantities of Less Than 1,000 Cubic Feet from an Industrial Survey Made by the University and the Public Service Commission of the State of Washington of the Patrons of the Above Company Under Existing Rates.

	Laborers	Artisans	Clerks	Teachers	Waitresses, Seamstresses, Dressmakers	Housewives, Cooks, Etc.	Businessmen and Merchants	Professional Men	Traveling Salesmen
GAS PLATES—									
Average monthly wage.....	\$105 00	\$153 00	\$123 00	.....	\$84 00	\$43 00	\$187 00	\$250 00	.....
Average amount paid for gas monthly	\$0 90	\$1 08	\$0 95	.....	\$1 07	\$1 07	\$1 00	\$1 10	.....
Per cent. of average wage.....	.86	.70	.77	.....	1.27	2.50	.63	.44	.....
Per cent. of total number tab- ulated	15.25	29.46	7.14	.....	1.73	1.78	34.82	9.83	.....
GAS RANGES—									
Average monthly wage.....	\$117 00	\$158 70	\$134 60	\$93 00	\$52 00	\$52 50	\$154 60	\$250 60	.....
Average amount paid for gas monthly	\$1 00	\$1 08	\$1 00	\$1 17	\$0 80	\$1 17	\$1 11	\$1 27	.....
Per cent. of average wage.....	.85	.68	.74	1.19	1.54	2.23	.73	.51	.....
Per cent. of total number tab- ulated	10.19	26.85	13.00	1.00	1.00	1.85	31.43	8.33	.....
RECAPITULATION—									
Average monthly wage.....	\$109 70	\$174 00	\$130 50	\$98 00	\$73 30	\$47 50	\$174 25	\$250 00	.....
Average amount paid for gas monthly	\$0 93	\$1 20	\$1 00	\$1 17	\$1 00	\$1 12	\$1 05	\$1 15	.....
Per cent. of average wage.....	.85	.70	.77	1.19	1.37	2.40	.86	.46	.....
Per cent. of total number tab- ulated	12.73	28.13	10.00	.45	1.36	1.82	33.13	9.09	.....

AVERAGE OF ALL.

Average monthly wage..... \$153 40
 Average amount paid for gas monthly..... \$1 04
 Per cent. of average wage..... .66

Aberdeen and Hoquiam have been enjoying a period of great prosperity, and the price paid for oil used in the making of water gas in those cities, owing to water connection with California, is much lower than the price paid for the same material in Spokane which elements undoubtedly are reflected in the table; the point that we call particular attention to is, that the price paid for the first thousand feet of gas is not necessarily burdensome upon the so-called small consumer or person of ordinary means. And this table shows that the business men and merchants of these cities, who constitute 33 per cent of the users of gas of a thousand cubic feet or less per month, would share in any reduction of the first rate, and the losses occasioned thereby would have to be borne by the larger consumers, some of whom, in the very nature of things would be poor men.

Under date of the 20th instant we called upon the gas company among other things to furnish us a statement of its total revenues from the month of August to October, inclusive, 1917; total operating expenses from the month of August to October, inclusive, 1917, and the taxes apportioned to these months, and the same information for the same months in 1918. Their answer is as follows:

During the period of August, September and October, 1918, within which period the new rates were in effect, the operating statistics were as follows:

Gross earnings	\$91,809 00
Operating expenses	72,295 00
Net	<u>\$19,514 00</u>
Multiplying by 4 we would have for the year, net	\$78,056 00
Deducting depreciation	<u>40,001 00</u>
Amount earned	\$38,055 00
Per cent. earned.....	<u>3.32</u>
Plant value	\$1,142,000 00

which clearly demonstrates that upon the investment of the company in Spokane it is earning but a small rate of return.

Under all the circumstances we feel that substantial justice has been meted out in our order of June 6, 1918.

Many of us dream of the good old times when everything was cheap and plentiful in the days of our forbears. It is probable, however, if we were content to use the little with which they got along with in those olden times, that our expenses would be much less than theirs were. We are oft-times prone to believe that we are paying out too much for commodities and that stockholders are fattening from unjust exactions. We have in Aberdeen and Hoquiam a lighting company which is actually losing money and this during a period of prosperity, where in other lines of business not regulated by a public body, enormous profits are being made.

We believe the conditions there justify quoting an article appearing in the December 7, 1918, number of the Literary Digest, which is as follows:

THE CHEAPNESS OF LIGHT.

That the average American family pays no more today for its light than it did in the day of the tallow candle is the assertion of an editorial writer in *Engineering and Contracting* (Chicago). That it has about twenty times as

much light for its money is an incidental fact that seems to the writer worth notice. Even if his estimate of \$2 a month for electric light should appear a little low, there is enough margin to make his comparisons remarkable. Here is at least one necessity, he says, whose cost to the average family can be compared with what it was a century ago, tho we use it in twentyfold quantity. Whose labor brought about this result? And has he been paid what it is worth to the world? The writer hurls these questions at the thinkers who would credit the coal-miner, the fireman, the engineer, and the wireman with it all. He writes:

"Of all the necessities of life there is probably but one that annually costs each household no more today than it did a century ago. That necessity is light. According to Dr. Walton Clark, president of the Franklin Institute, the average American family in 1815 used sperm-oil and tallow candles that cost \$22 a year. This \$22 purchased 25 candle-power-hours per night, or 9,000 candle-power hours per annum, from 1815 to 1855. Then came kerosene, which at that time was two-thirds as expensive per candle-power as tallow candles. However, instead of reducing the annual outlay for light, the average family continued to expend about \$22 a year, for which were secured some 13,500 candle-power-hours.

"During the decade of 1865 to 1875 the tallow candle was completely displaced by the improved kerosene-lamp and illuminating gas; and the average annual cost for lighting each house was about \$24. Gas then sold at \$2.50 per 1,000 cubic feet, and the family that used gas entirely spent about \$34 a year.

"From 1875 to 1885 kerosene was reduced to 22 cents per gallon and gas to \$2 per 1,000 cubic feet. The average family spent \$30 a year and secured 76,000 candle-power-hours. During the next decade the price of kerosene dropt to 13 cents per gallon and gas went down to \$1.50; but with this reduction of 40 per cent. in prices came a reduction of only 17 per cent. in the annual expenditure for lighting, the average yearly cost then being \$25 per household.

"Between 1895 and 1905 kerosene had practically disappeared in city houses, for gas had not only fallen to \$1 per 1,000 cubic feet in the larger cities, but electric current had fallen to 10 cents per kilowatt-hour. Using electricity at this price, and with 'carbon-filament lamps,' the average family secured 50,000 candle-power-hours yearly, for which was paid \$25.

"During the next decade (1905-1915) an astonishing advance occurred in the science of economic illumination, both with gas and electricity. The Welsbach incandescent gas-burner, which had been invented in 1887, was enormously improved, and coincidently the mazda or 'tungsten-filament' incandescent electric lamp was developed.

"Today, with gas at \$1, a thrifty family can secure 200,000 candle-power of gas light for \$15 a year; and a similar family, using electricity at 10 cents, can secure 125,000 candle-power-hours of electric light for \$18 a year.

"Supplementing the foregoing figures of Dr. Clark, the editor is able to say that his appraisals of electric plants and studies of electric rates in many cities have shown that the average family using electricity spends about \$2 a month or \$24 a year for light. The \$24 ordinarily buys 240 kilowatt-hours; and, using mazda lamps, each kilowatt produces about 1,000 candle-power, so that the 240 kilowatt-hours generate 240,000 candle-power-hours. The average useful life of a mazda lamp is 1,000 hours of steady burning, or about a year at three hours a day, and adding the cost of the lamps (four yearly) to the cost of the electric current (\$20 yearly) enables a family annually to buy 200,000 candle-power-hours for \$24.

"We thus come to two astonishing facts: First, that during the last one hundred years the average American family has not departed widely from an expenditure of \$24 a year for light. Secondly, that the family of today, altho spending almost the same sum annually for illumination as was spent by the family of a century ago, secures more than twenty times as much light. This astonishing result is due entirely to American inventors, engineers, and business men."

Order.

We see no reason why the rates of the North Pacific Public Service Company, effective July 1, 1918, should not be allowed to stand.

Wherefore, It Is Ordered, That said rates be, and the same are, hereby approved.

Witness, The Public Service Commission of Washington, this 19th day of December, 1918.

No. 4741.

The Public Service Commission of Washington, and the City of Seattle, a Municipal Corporation, Complainants, v. Seattle Lighting Company, a Corporation, Respondent.

October 4, 1918, respondent filed with the Commission its tariff providing for increased gas rates in Seattle. November 8, 1918, the city of Seattle protested such increase by formal complaint. Later, conditions having materially changed, the hearing was postponed on application of the respondent. December 19, 1918, respondent notified the Commission of its abandonment of its application for increased rates, and the following was entered:

This matter coming on for hearing before the Public Service Commission of Washington upon the application of the Seattle Lighting Company, it is ordered that this cause be, and the same is, hereby dismissed without prejudice.

Witness, The Public Service Commission of Washington, this 19th day of December, 1918.

No. 4790.

The Public Service Commission of Washington, Complainant, v. The Pacific Power and Light Company, Respondent.

Respondent filed concurrently tariff of increased gas rates in Yakima and Walla Walla, to become effective March 10, 1919. Investigations of both situations were made, and a hearing was held at Yakima, March 28, 1919, and at Walla Walla, March 29, 1919. Findings and Order were entered as follows:

I.

The Pacific Power and Light Company owns and operates for hire, gas plants in the cities of Yakima and Walla Walla.

II.

On the 28th day of February, 1918, the Public Service Commission of Washington approved rates of the respondent company in the city of Yakima, permitting substantial increase in the price of gas in said city.

III.

February 6, 1919, the respondent company filed with the Public Service Commission its tariff No. 58 cancelling tariff No. 56 issued February 7, 1919,

to become effective March 10, 1919, seeking thereby to increase present rates in Yakima as follows:

ORDINARY METERS.

<i>Cubic Feet Per Month</i>	<i>Present Rate</i>	<i>Proposed Rate</i>	<i>Discount Present and Proposed Rate</i>
0 to 100.....	\$0.75	\$0.90	\$0.10
200.....	.85	1.00	.10
300.....	.95	1.10	.10
400.....	1.05	1.20	.10
500.....	1.20	1.30	.10
600.....	1.30	1.40	.10
700.....	1.40	1.50	.10
800.....	1.50	1.60	.10
900.....	1.60	1.70	.10
1,000.....	1.70	1.80	.10
Next 1,000	1.65 per M.	1.80 per M. cu. ft.	.10
Next 1,000	1.60 per M.	1.75 per M. cu. ft.	.10
Next 1,000	1.55 per M.	1.70 per M. cu. ft.	.10
Next 1,000	1.50 per M.	1.60 per M. cu. ft.	.10
Next 5,000	1.40 per M.	1.50 per M. cu. ft.	.10
All over 10,000.....	.90 per M.	1.00 per M. cu. ft.	.10

PREPAY METERS.

<i>Cubic Feet Per Month</i>	<i>Present Rate</i>	<i>Proposed Rate</i>	<i>Discount Present and Proposed Rate</i>
0 to 100.....	\$0.75	\$0.90	\$0.10
200.....	.85	1.00	.10
300.....	.95	1.00	.10
400.....	1.05	1.20	.10
All over 400.....	1.65 per 1,000 cu. ft.	1.80 per 1,000 cu. ft.	.10

The above discounts will be allowed only when payment is received within ten days from date of bill, and a failure to receive bill will not entitle consumer to discount.

IV.

Based upon the Commission's engineer's appraisal of June 30, 1913, with net additions to property as shown by the books of said company to December 31, 1918, the probable cost of respondent's plant at Yakima is \$260,598.69; the average plant value based upon reproduction cost to the same date being \$258,673.00; and the average plant value \$223,402.00.

V.

That all the gas property of the respondent company at Yakima is used and useful and reasonably answers the gas needs of said community.

VI.

From the books of the respondent company, the Commission's accountant has determined gross operating revenues, expenses, amount earned and per cent earned as follows:

	<i>1917</i>	<i>1918</i>
Gross revenues	\$49,968 68	\$58,787 39
Operating expenses	38,937 80	50,985 59
Amount earned	\$11,030 88	\$7,801 80
Per cent. plant value.....	5.16	3.51
Per cent. reproduction cost....	3.71	2.40
Per cent. depreciation allowed..	3.9	3.9

VII.

The cost of production by the respondent company at Yakima of 1,000 cubic feet of gas for 1917 was \$.6352 and for 1918 the cost was \$.7692; most of the increased cost of production being the result of the advance in wages and coal.

VIII.

In 1917 the respondent made at Yakima 42,606 M. cubic feet of gas and sold 36,791.3 M. cubic feet of gas; in 1918 it made 49,178.9 M. cubic feet of gas and sold 40,264.2 M. cubic feet of gas. Its sales in 1918 over 1917 being 3,472.9 M. cubic feet.

IX.

On the 26th day of February, 1918, the Public Service Commission of Washington approved rates of the respondent company in the city of Walla Walla, permitting substantial increase in the price of gas in said city.

X.

February 6, 1919, the respondent company filed with the Public Service Commission its tariff No. 58 cancelling tariff No. 56 issued February 7, 1919, to become effective March 10, 1919, seeking thereby to increase present rates in Walla Walla as follows:

ORDINARY METERS.

<i>Cubic Feet Per Month</i>	<i>Present Rate</i>	<i>Proposed Rate</i>	<i>Discount Present and Proposed Rate</i>
0 to 100.....	\$0.95	\$1.00	\$0.10
200.....	1.05	1.20	.10
300.....	1.15	1.30	.10
400.....	1.25	1.40	.10
500.....	1.35	1.50	.10
600.....	1.45	1.60	.10
700.....	1.55	1.70	.10
800.....	1.65	1.80	.10
900.....	1.75	1.90	.10
1,000.....	1.90	2.00	.10
Next 1,000	1.85 per 1,000 cu. ft.	2.00 per 1,000 cu. ft.	.10
Next 1,000	1.80 per 1,000 cu. ft.	1.90 per 1,000 cu. ft.	.10
Next 1,000	1.75 per 1,000 cu. ft.	1.80 per 1,000 cu. ft.	.10
Next 1,000	1.70 per 1,000 cu. ft.	1.75 per 1,000 cu. ft.	.10
Next 5,000	1.40 per 1,000 cu. ft.	1.50 per 1,000 cu. ft.	.10
All over 10,000.....	.90 per 1,000 cu. ft.	1.00 per 1,000 cu. ft.	.10

PREPAY METERS.

<i>Cubic Feet Per Month</i>	<i>Present Rate</i>	<i>Proposed Rate</i>	<i>Discount Present and Proposed Rate</i>
0 to 100.....	\$0.95	\$1.00	\$0.10
200.....	1.05	1.20	.10
300.....	1.15	1.30	.10
400.....	1.25	1.40	.10
All over 400.....	1.85 per 1,000 cu. ft.	2.00 per 1,000 cu. ft.	.10

The above discounts will be allowed only when payment is received within ten days from date of bill, and a failure to receive bill will not entitle consumer to discount.

XI.

The Commission has never appraised the Walla Walla gas plant of the respondent company; it has, however, had occasion to examine said plant and examine into the books of the company, and the same has heretofore been valued by Mr. Hagenah, employed by the utility. Based upon Mr. Hagenah's report, with additions of property thereto as shown by the books of the company, the value of the plant would be \$413,939.00. We are satisfied, however, that the value of the said plant for rate-making purposes does not exceed the average plant value as determined by the accountant of this Commission, which is \$276,461.00.

XII.

All the gas property of the respondent company at Walla Walla is used and useful and reasonably answers the gas needs of said community.

XIII.

From the books of the respondent company, the accountant of this Commission has determined the gross operating revenues and expenses, amount earned and per cent earned of the Walla Walla plant as follows:

	1917	1918
Gross revenues	\$51,625 53	\$58,156 18
Operating expenses	44,505 90	56,869 86
Amount earned	\$7,019 63	\$1,286 32
Per cent. plant value.....	2.6	.47
Per cent. Hagenah's report....	.49	.85*
Per cent. depreciation allowed..	3.5	3.5

* Indicates red figures.

XIV.

The cost of production by the respondent company at Walla Walla of 1,000 cubic feet of gas in 1917 was \$.7801 and in 1918, \$1.1202; most of the increased cost of production of 1918 over 1917 being the result of the advance in wages and coal.

XV.

The respondent company at Walla Walla in 1917 made 36,628 M. cubic feet of gas and sold 31,802.3 M. cubic feet of gas. In 1918 it made at the same place 36,271.6 M. cubic feet of gas and sold 32,994.6 M. cubic feet of gas.

XVI.

From the study of this Commission and as shown in the reports of its engineers and accountants, used as exhibits when the Commission allowed substantial increase in the rates of respondent company both at Yakima and

Walla Walla, we find the earnings of the respondent company at Yakima, based upon the average plant value, to be as follows:

1912.....	1.90%
1913.....	4.46%
1914.....	3.3%
1915.....	2.31%
1916.....	3.62%
1917.....	5.16%

While for Walla Walla we find for

1912.....	.78%
1913.....	.35%
1914.....	.83% (red)
1915.....	2.36%
1916.....	2.06%
1917.....	2.60%

Opinion.

From the foregoing findings it is clearly to be seen that the gas plants of the respondent company at Yakima and Walla Walla from 1912 to date have not been paying properties. While the war was on this Commission permitted a substantial increase in rates to the respondent, but in face of these increases, the per cent of the respondent's earnings in Yakima fell from 5.16 in 1917 to 3.51 in 1918, and in Walla Walla they fell from 2.6 in 1917 to .47 of 1 per cent in 1918. Under the present schedule of rates, the charge for 1,000 cubic feet of gas in Yakima is \$1.60 net, and we are asked to permit the company to increase it to \$1.70 net. In Walla Walla, under the present schedule rate, the charge for 1,000 cubic feet of gas is \$1.80 net, and we are asked that the utility may increase the charge to \$1.90 net and corresponding increases are asked for in both cities on the various amounts of gas sold and these increases are asked at a time when the war is supposed to be practically over and the world is desirous of returning to a normal basis. We are sure from our knowledge of the gas business gained from a study of the different gas plants of this state, that the respondent company, as to its plants, is upon a better earning basis than almost any other gas company in the state.

The gas business seems to be at a standstill. The increased cost of labor, oil and coal, which are very material factors in the production of gas, is forcing the selling price of gas to such a high figure as not to permit of a large increase in its use by small customers. It has virtually ceased to be a lighting agency and is practically confined to the heating field; and in Yakima and Walla Walla it is limited almost wholly to cooking purposes. Judged by its present price in these two cities, it is a luxury. We, however, can see no future for it unless it can be brought within the purchasing power of those of modest income. We are strongly of the opinion that unless the gas plants at Yakima and Walla Walla are soon saturated, the respondent must fail in those undertakings.

At the hearing at Yakima it developed that in the plant in that city, labor was not performing the same service for an increased daily wage as was performed formerly. We doubt whether we should recognize the constantly increasing demands of a utility where it is admitted that the utility is giving way to requests that are not in themselves reasonable. Granting

requests which result in additional cost of a commodity, with the idea of placing the burden on someone else, involves an error which will some day wreck our industrial fabric and those who work must finally suffer more keenly than those who have a competence.

The price of gas coal at Yakima and Walla Walla seems to be out of all reason. The respondent may have little direct control over the price of coal. There is, however, a possibility of public sentiment controlling prices and we feel it is the duty of the utility to join in creating a proper public sentiment rather than to acquiesce readily in unjust exactions.

As the respondent through the years has made but little money and during the war we granted its request for substantial increases, we do not see our way clear, under all the circumstances now at the close of hostilities, to grant further substantial increases. Deeming the present an inopportune time to grant an increase in rates, we prefer to hold matters in abeyance until more normal times are at hand.

Order.

Wherefore, It Is Ordered, That the respondent's applications for increased rates at Yakima and Walla Walla be, and the same are, hereby both denied.

Witness, The Public Service Commission of Washington, this 10th day of April, 1919.

No. 4815.

The Public Service Commission of Washington, ex rel. Joseph P. Hurley, P. B. Lack and Other Patrons at Chehalis and Centralia, Complainants, v. North Pacific Public Service Company, a Corporation, Respondent.

The Commission in its own behalf and on the relation of consumers, protested a tariff increasing the gas rates in Chehalis and Centralia. After investigation, a hearing was held May 23, 1919, at Centralia, and the following entered:

Findings of Fact.

I.

That the North Pacific Public Service Company is a corporation engaged in the manufacture, distribution and sale of gas in the cities of Centralia and Chehalis in Lewis county, Washington.

II.

That on the 10th day of April, 1919, the respondent filed with this Commission its supplement No. 3 to W. P. S. C. Tariff No. 1 to become effective May 8, 1919, naming gas rates to be charged in the cities of Chehalis and Centralia, the effect of which was to increase the gas rates in said cities, if permitted to become effective; and, on April 30, 1919, the Commission suspended the operation of said supplement for a period of thirty (30) days from May 8, 1919.

III.

That the rates named in said supplement No. 3 are as follows:

RATES FOR GAS IN CENTRALIA AND CHEHALIS.

For Gas Used Through One Meter in One Month.

Quantity	Gross	Net
100 cubic feet or less.....	\$1.00	\$1.00
200 cubic feet.....	1.00	1.00
300 cubic feet.....	1.00	1.00
400 cubic feet.....	1.05	1.00
500 cubic feet.....	1.15	1.10
600 cubic feet.....	1.35	1.30
700 cubic feet.....	1.55	1.50
800 cubic feet.....	1.75	1.70
900 cubic feet.....	1.90	1.85
1,000 cubic feet.....	2.05	2.00
Next 4,000 cubic feet.....	1.85	1.80
Next 5,000 cubic feet.....	1.60	1.55
Next 5,000 cubic feet.....	1.50	1.45
Over 15,000 cubic feet.....	.85	.80

Net rate to be allowed only when payment is received within ten days from date of bill.

All gas furnished through prepayment meters \$2.25 per thousand cubic feet up to 2,000 cubic feet and \$1.85 per thousand cubic feet for all in excess of two thousand cubic feet per month; no charge less than \$1.00 per month for each meter.

IV.

That the property of the respondent company has never been valued by this Commission.

V.

That the financial showing of the respondent is such that we would not be justified in expending the people's money in making a valuation.

VI.

That the cost of property as taken from the books of the respondent by the Commission's chief engineer, D. F. McCurrach, and his assistants, is as follows:

	1916	1917	1918	3 Months 1919
Organization and franchises.....	\$2,814 73	.....	.....	.....
Land	567 19	.....	.....	.....
Buildings, fixtures and grounds...	3,882 18	\$18 54	\$2 68	.....
Coal gas apparatus.....	17,333 37	15 99	5 63	.....
Distribution mains	28,186 86	50 57	.....	.....
Outlying holders	25,832 47	.....	.....	.....
Services	13,777 59	578 06	625 79	\$83 97
Meters and service regulators....	13,779 35	190 53	149 71	30 99
Commercial lamps and equipment.	7,833 23	384 70	.....	2 70
Utility equipment	636 69	305 00	45 13	.....
Miscellaneous equipment	922 90	2 47	.....	.....
Furniture and office appliances....	1,076 62	.....	3 00	.....
General expense	3,830 20	18 10	84 49	.....
Interest during construction.....	14,517 30	.....	.....	.....
Development expense	4,924 75	.....	.....	.....
Totals	\$139,915 43	\$1,563 96	\$916 43	\$117 66
Cumulative totals .....	.....	\$141,479 39	\$142,395 82	\$142,513 48

VII.

That the income and expenses for the years 1917, 1918 and the first three months of 1919 are as follows:

	1917	1918	3 Months 1919
Operating revenues	\$24,766 29	\$27,153 94	\$7,749 15
Operating expenses	20,514 48	26,548 59	6,978 67
Gross income	\$4,251 81	\$605 35	\$770 48
Deductions from Gross Income:			
Taxes	\$1,202 87	\$1,277 35	\$330 00
Depreciation, 3.5%	4,924 40	4,966 05	1,246 48
Total deductions	\$6,127 27	\$6,243 40	\$1,576 48
Amount earned	\$1,875 46*	\$5,638 05*	\$806 00*
Average plant value.....	\$140,697 00	\$141,887 00	\$142,455 00
Rate of return earned.....	1.83%*	3.98%*	2.27%*

* Indicates red figures.

VIII.

That the revenue for the same period, after discounts and adjustments have been made is as follows:

	1917	1918	3 Months 1919
Operating Revenues:			
Commercial heat and light metered.	\$25,210 18	\$27,495 30	\$7,827 63
Non-Operating Revenues:			
Profit on merchandise sales and jobbing	\$194 61	\$814 81	\$191 49
Rents from arc lamps and appliances	650 10	511 80	132 85
Miscellaneous	1,058 94*	47 19	102 72
Total non-operating revenues..	\$1,903 65	\$1,373 80	\$427 06
Gross revenues	\$27,113 83	\$28,869 10	\$8,254 69
Less:			
Discounts and adjustments, etc....	\$1,093 99	\$853 16	\$211 33
Net revenues	\$26,019 84	\$28,015 94	\$8,043 36

* Inventory adjustment.

IX.

That the operating expenses and cost per 1,000 cubic feet of gas for years 1917, 1918 and first three months of 1919 are as follows:

	1917	1918	3 Mo. 1919	COST PER M. CU. FT.		
				1917	1918	3 Mo. 1919
PRODUCTION—						
Operation labor	\$3,931 80	\$5,004 15	\$1,575 76	\$0.2083	\$0.2861	\$0.2861
Coal carbonized	8,846 28	12,817 87	3,688 47	4.4627	0.6772	0.6668
Enricher and bench fuel	1,943 98	3,784 62	1,032 87	0.1017	0.2000	0.1875
Boiler fuel and water	1,774 13	2,878 82	707 25	0.0928	0.1521	0.1524
Purifying materials	4 50	47 67	69 40	0.0002	0.0025	0.0126
Miscellaneous supplies and expenses	441 97	591 58	138 93	0.0232	0.0812	0.0252
Residual expense	623 74	499 53	182 07	0.0626	0.0264	0.0330
Total cost of production	\$17,616 40	\$36,224 24	\$7,394 75	\$0.9215	\$1.3855	\$1.3425
Less value of residuals	6,286 16	11,219 98	3,011 38	0.3230	0.5928	0.5468
Net production expense	\$11,327 24	\$15,004 26	\$4,383 37	\$0.5925	\$0.7927	\$0.7958
Maintenance works apparatus	376 77	739 16	154 81	0.0197	0.0330	0.0231
Maintenance buildings, fixtures and grounds	66 18	132 74	90 00	0.0035	0.0066	0.0163
Total production expense	\$11,770 19	\$15,926 13	\$4,628 18	\$0.6157	\$0.8413	\$0.8402
Total gas made, M. cu. ft.	19,117.3	18,927	5,507.1			
DISTRIBUTION—						
Operation						
Superintendence	\$532 50	\$855 00	\$150 00	\$0.0344	\$0.0380	\$0.0341
Patrol and inspection of mains	6 09			0.0004		
Meters and regulators	237 18	383 77	100 43	0.0192	0.0206	0.0229
Services	62 57	89 26	56 92	0.0040	0.0058	0.0001
Miscellaneous supplies and expenses	118 96	178 34		0.0077	0.0116	0.0129
Total operation	\$1,017 30	\$1,246 37	\$307 91	\$0.0657	\$0.0810	\$0.0700
Maintenance—						
Mains	\$61 66	\$95 22	\$16 74	\$0.0040	\$0.0062	\$0.0038
Services	22 21	65 73	8 88	0.0014	0.0043	0.0020
Meters and service regulators	6 20	61 13	21 23	0.0004	0.0039	0.0048
Miscellaneous supplies and expense						
Total maintenance	\$90 07	\$222 08	\$46 85	\$0.0053	\$0.0144	\$0.0106
Total distribution expense	\$1,107 37	\$1,468 45	\$354 76	\$0.0715	\$0.0864	\$0.0806

	1917	1918	3 Mo. 1919	COST PER M. CU. FT.		
				1917	1918	3 Mo. 1919
UTILIZATION—						
Commercial arc lamps, operation.....	\$1,828 27	\$1,561 22	\$377 10	\$0.0853	\$0.1016	\$0.0858
Commercial arc lamps, maintenance.....	12 89			0.0008		
Consumers installations	183 77	315 64	55 67	0.0199	0.0205	0.0126
Total utilization expense.....	\$1,522 93	\$1,876 86	\$432 77	\$0.0965	\$0.1221	\$0.0964
COMMERCIAL—						
Commercial expense (soliciting and advertising).....	\$2,193 17	\$3,517 44	\$845 00	\$0.1419	\$0.2239	\$0.1924
GENERAL—						
Salary and expense (general officers).....	\$572 47	\$672 62	\$172 99	\$0.0535	\$0.0437	\$0.0393
Salary and expense (clerks).....	1,089 21	534 90	91 00	0.0672	0.0349	0.0207
Printing and stationery.....	51 56	50 30	15 00	0.0033	0.0032	0.0024
General office expenses.....	1,083 54	1,448 75	307 93	0.0701	0.0942	0.0701
Miscellaneous general expense.....		8 00			0.0005	
Law expense, injuries and damages.....	17 07	52 22		0.0012	0.0034	
Store expense	9 82			0.0006		
Auto expense	454 31	504 00	209 21	0.0234	0.0235	0.0476
Tacoma office expense.....	271 85	363 30	98 28	0.0176	0.0256	0.0223
Industrial insurance	120 09	96 62	23 55	0.0078	0.0062	0.0053
Total general expense.....	\$3,920 82	\$3,759 71	\$717 96	\$0.2537	\$0.2445	\$0.2087
Total all expenses.....	\$90,514 43	\$96,545 59	\$6,978 67	\$1.3272	\$1.728	\$1.5889
Taxes	\$1,207 87	\$1,277 85	\$330 00	\$0.0782	\$0.0631	\$0.0751
Gas sold, M. cu. ft.....	15,485	15,864.8	4,391.9			

X.

That a comparison of costs, taking the average for the year 1918 and the actual for the month of February, 1919, is as follows:

	1918				FEBRUARY, 1919		Increase	Decrease
	Unit	Quantity	Price	Total	Price	Total		
Coal carbonized	Tons.....	1,902.917	\$6.7359	\$12,817.87	\$6.5883	\$12,536.99	.....	.....
Bench Fuel—								
Coke	Tons.....	549.545	6.570	3,610.76	7.008	3,851.21	.....	.....
Coal	Tons.....	36.448	4.254	155.05	4.254	155.05	.....	.....
Boiler Fuel—								
Coke	Tons.....	201.414	6.554	1,320.09	7.00	1,409.99	.....	.....
Coal	Tons.....	507.818	2.2745	1,155.08	2.6698	1,350.69	.....	.....
Total cost				\$19,058.85	.....	\$19,303.93	\$245.08	.....
Residuals—								
Coke	Tons.....	1,277.385	\$6.021	\$8,458.34	\$7.00	\$8,941.70	.....	.....
Tar	Gallons...	18,223	.1319	2,404.66	.1500	2,733.45	.....	.....
Total residuals				\$10,863.00	.....	\$11,675.15	\$812.15	.....
Net cost				\$8,196.85	.....	\$7,628.73	.....	\$567.07
Pay roll				5,620.25	.....	6,840.25	\$720.00	.....
Taxes				1,277.35	.....	1,346.83	69.48	.....
Totals				\$15,093.45	.....	\$15,315.86	\$222.41	.....

XI.

That the revenues under the present and proposed schedules, based on the average number of consumers and consumption, are as follows:

PRESENT SCHEDULE.

	Number of Consumers	Consumption Cubic Feet	Present Schedule Rates	Amount
0 to 100 cu. ft.....	55.18	3,650	\$0.75	\$41 38
200 cu. ft.....	65.58	13 117	.75	49 19
300 cu. ft.....	89.33	26,800	.80	71 46
400 cu. ft.....	89.92	35,967	.85	76 43
500 cu. ft.....	89.67	44,833	1.00	89 67
600 cu. ft.....	71.33	42,800	1.20	85 60
700 cu. ft.....	59.75	41,825	1.35	80 66
800 cu. ft.....	52.92	42,333	1.50	79 38
900 cu. ft.....	46.67	42,000	1.65	77 00
1,000 cu. ft.....	36.17	36,167	1.80	65 11
1,100 to 5,000 cu. ft.....	254.25	507,783	\$1.80 per M. to 1.65 per M.	875 98
5,100 to 10,000 cu. ft.....	25.33	173,633	1.80 per M. to 1.55 per M.	285 60
10,100 to 15,000 cu. ft.....	5.17	62,600	1.80 per M. to 1.45 per M.	99 29
Over 15,000 cu. ft.....	6.25	199,775	1.80 per M. to .80 per M.	231 07
Totals.....	947.51	1,273,233		\$2,207 82

PROPOSED SCHEDULE—ORDINARY METERS.

	Number of Consumers	Consumption Cubic Feet	Present Schedule Rates	Amount
0 to 100 cu. ft.....	33.00	2,341	\$1.00	\$33 00
200 cu. ft.....	40.75	8,150	1.00	40 75
300 cu. ft.....	53.33	16,000	1.00	53 33
400 cu. ft.....	52.08	20,833	1.00	52 08
500 cu. ft.....	51.58	25,792	1.10	56 74
600 cu. ft.....	43.00	25,800	1.30	55 90
700 cu. ft.....	35.92	25,141	1.50	53 88
800 cu. ft.....	32.33	25,867	1.70	54 96
900 cu. ft.....	28.92	26,025	1.85	53 50
1,000 cu. ft.....	22.58	22,583	2.00	25 16
1,100 to 5,000 cu. ft.....	187.92	386,474	\$2.00 per M. to 1.80 per M.	733 24
5,100 to 10,000 cu. ft.....	19.33	132,633	2.00 per M. to 1.55 per M.	233 62
10,100 to 15,000 cu. ft.....	4.25	51,633	2.00 per M. to 1.45 per M.	85 28
Over 15,000 cu. ft.....	5.92	194,033	2.00 per M. to .80 per M.	227 45
Totals.....	610.91	963,305		\$1,778 89

PROPOSED SCHEDULE—PREPAYMENT METERS.

	Number of Consumers	Consumption Cubic Feet	Present Schedule Rates	Amount
Minimum 0 to 400 cu. ft.....	120.33	32,208	\$1.00	\$120 33
0 to 2,000 cu. ft.....	191.17	167,508	\$2.25 per M.	376 89
Over 2,000 cu. ft.....	24.63	110,258	2.25 per M. to 1.85 per M.	223 64
Totals.....	336.58	309,974		\$721 36
Total proposed schedule.....	947.49	1,273,279		\$2,500 25
Increase per month.....				\$292 43
Increase per year.....				3,509 16

XII.

That the following is an analysis of gas sales during the year ending December 31, 1918:

Range of Average Monthly Consumption of Consumers in Groups (Cubic Feet)	Actual Average Consumption per Consumer per Month Throughout Year (Cubic Feet)	Actual Average Consumption per Month of Each Group (Cubic Feet)	Number of Consumers in Each Group	Percentage of Total Consumption Represented by Groups	
				Group Percentage	Cumulative Percentage
000	000	000	18.67	.....	.....
100	100	3,650	36.50	.29	.29
200	200	13,117	65.58	1.03	1.32
300	300	26,800	89.33	2.10	3.42
400	400	35,967	89.92	2.82	6.24
500	500	44,833	89.67	3.52	9.76
600	600	42,800	71.33	3.36	13.12
700	700	41,825	59.75	3.28	16.40
800	800	42,333	52.92	3.33	19.73
900	900	42,000	46.67	3.80	23.53
1,000	1,000	36,167	36.17	2.84	25.87
1,100 to 5,000	1,997	507,783	254.25	39.88	65.75
5,100 to 10,000	6,854	173,633	25.33	13.64	79.89
10,100 to 15,000	12,116	62,600	5.17	4.92	84.81
Over 15,000	31,964	199,775	6.25	15.60	100.00
Totals .....	.....	1,273,283	947.51	100.00	.....

XIII.

That the gas made and sold for the years 1917, 1918 and first three months of 1919 is as follows:

	1917	1918	3 Months 1919
Gas made (M. cu. ft.)	19,117.3	18,927.	5,507.1
Gain or loss in storage	-7.1	+ 20.5	+ 14.0
Gas delivered to mains	19,124.4	18,896.5	5,493.1
Gas sold	15,464.	15,364.8	4,391.9
Gas used by company	406.3	565.6	187.5
Total sold and used	15,870.3	15,930.4	4,579.4
Unaccounted for	3,254.1	2,966.1	913.7
Unaccounted for in per cent. of sendout ..	17.0%	15.70%	16.63%

XIV.

That since the year 1915 the respondent has failed to earn a sum sufficient to meet its operating expenses, taxes and depreciation, and since its existence has never earned sufficient to pay a dividend nor to pay all interest due on its just liabilities.

XV.

That the plant of the respondent is operated economically and efficiently.

XVI.

That the complainants introduced testimony showing the charges made for gas in cities located in the states of Oregon, Idaho and Montana as follows:

OREGON.		<i>Gross</i>
Portland	\$1.00 per 1,000 cu. ft.	
Astoria	1.25 per 1,000 cu. ft.	
Baker	2.50 per 1,000 cu. ft.	
Eugene	1.50 per 1,000 cu. ft.	
Marshfield and North Bend.....	1.70 per 1,000 cu. ft.	
Pendleton	2.00 per 1,000 cu. ft.	
Salem	1.60 per 1,000 cu. ft.	
Grants Pass and Medford.....	1.05 first 200 cu. ft. or less	
MONTANA.		<i>Gross</i>
Billings	\$1.95 per 1,000 cu. ft.	
Great Falls	1.95 per 1,000 cu. ft.	
Helena	2.00 per 1,000 cu. ft.	
Missoula	1.85 per 1,000 cu. ft.	
Butte	1.65 per 1,000 cu. ft.	
IDAHO.		<i>Gross</i>
Pocatello	\$2.00 per 1,000 cu. ft.	
Boise	2.10 per 1,000 cu. ft.	
Lewiston	2.15 per 1,000 cu. ft.	

Opinion.

From the foregoing it is clearly seen that the gas plant supplying Chesham and Centralia, from its inception to date, has not been a paying property. In fact, the company has not only failed to earn operating expenses and depreciation, but did not during the year 1918 earn its bare operating expenses notwithstanding the Commission permitted an increase of rates February 1, 1918. If this company were earning any return on its investment over and above expenses and depreciation, the Commission might be justified at this time in holding the second increase in abeyance until more normal times are at hand. Under the financial showing as set forth in the findings of fact, we would not be justified in doing so.

Order.

Wherefore, It Is Ordered, That the protest of the complainants herein be denied and the schedule of the respondent company be, and the same is, permitted to become effective June 7, 1919.

Witness, The Public Service Commission of Washington, this 7th day of June, 1919.

No. 4901.

The Public Service Commission of Washington, Complainant, v. Seattle Lighting Company, Respondent.

The City of Seattle, a Municipal Corporation, Complainant, v. Seattle Lighting Company, Respondent.

In this case the Commission and the city of Seattle complained of the quantity and quality, purity and pressure of the gas furnished by respondent,

and also of the adequacy and efficiency of its service covering the period subsequent to September 6, 1919. A hearing was held at Seattle October 3, 1919, and the following entered:

Findings of Fact.

I.

That the respondent, Seattle Lighting Company, is a public service company owning, controlling, operating and managing a gas plant in the city of Seattle for the manufacture, distribution, sale and furnishing of gas for light and heat for hire.

II.

That the respondent company for a period ranging from two to three weeks subsequent to September 6, 1919, failed to furnish and supply safe, adequate and efficient service, in that they failed to furnish a sufficient volume and quantity of gas to meet the needs and requirements of its patrons, and that the gas furnished during that period was not of the pressure required by Rule No. 17 of the Public Service Commission of Washington, relating to the quality of gas.

III.

That the gas furnished by the respondent company is now and has been since the filing of the complaint by the Public Service Commission of Washington, of the required standard of heating power and purity except as to its sulphur content.

IV.

That after the expiration of about two or three weeks following September 6, 1919, the volume and pressure of the gas furnished by the respondent company had been steadily approaching normal and at the time of the hearing and for a short period prior thereto the volume, pressure, quality and purity of said gas, except as to sulphur content, had become and now is normal.

V.

That for the period covered in the preceding finding, at least, the sulphur content of the gas furnished by the respondent, has at times been greater than that permitted by law and the rules of the Public Service Commission of Washington.

VI.

That the Commission does not at this time make any finding concerning the question of reparation, but withholds its finding and order upon that point until such time as briefs have been filed by the parties and it has been fully advised as to its jurisdiction to proceed thereon.

Wherefore, It Is Ordered, That the respondent company continue the furnishing of safe, adequate and efficient service; that it maintain at all times a sufficient volume and quality of gas; and that it cease distributing gas containing a sulphur content of more than thirty (30) grains per one hundred (100) cubic feet of gas.

Witness, The Public Service Commission of Washington, at Olympia, Washington, this 7th day of October, 1919.

ORDERS WAIVING STATUTORY NOTICE.

(From December 1, 1918, to November 30, 1919.)

The following orders were entered by the Commission on petition of the utilities, permitting new tariffs to become effective immediately, instead of effective after thirty days' notice.

No. 3124.

Washington Western Railway Company. Authorizing \$1.00 rate on logs in carload lots, twenty or more cars, Willis and Harnett to Three Lakes.

No. 3125.

Pacific Northwest Traction Company. To publish reduction in rate on lumber and shingles, carloads, between Larson and end of track at Pine and Dock streets.

No. 3126.

Pacific Northwest Traction Company. To publish reinstatement of \$6.50 per car freight rate on lumber and shingles, carloads, Larson to Bellingham.

No. 2137.

Newaukum Valley Railroad Company. To publish supplement No. 2 to W. P. S. C. No. 2, conforming to director general of railroads' order No. 28, relinquishment from federal control.

No. 3128.

Cowlitz, Chehalis & Cascade Railway Company. To publish Supplement No. 8 to their tariff No. 1, conforming to director general of railroads' order No. 28, relinquishment from federal control.

No. 3129.

Spokane International Railway Company. To change their tariff No. 5, W. P. S. C. No. 115, to local and joint passenger tariff No. 7, W. P. S. C. No. 134, relinquishment from federal control.

No. 3130.

Spokane International Railway Company. To publish their tariff No. 6, W. P. S. C. No. 133, naming reduced passenger fares for officers and enlisted men and nurses on furlough.

No. 3131.

Spokane International Railway Company. To publish supplement No. 1 to joint passenger tariff No. A-3, covering special passenger cars, on account of relinquishment from federal control.

No. 3132.

Shelton Transportation Company. To publish passenger tariff No. 3, W. P. S. C. No. 4, naming commutation passenger rates between Arcadia and Tacoma, and Tacoma and Arcadia.

No. 3133.

Valley Telephone Company, of Sunnyside. To publish supplements for exchange services covering reductions in rates.

No. 3134.

Washington Western Railway Company. To publish uniform storage tariffs in order to comply with order of Interstate Commerce Commission.

No. 3135.

Port of Seattle. To publish their supplement No. 1 to tariff No. 6, W. P. S. C. No. 8, covering reductions on account of changed conditions and Atlantic coast competition through Panama Canal.

No. 3136.

Tacoma Railway & Power Company. To publish their passenger tariff No. 4, making street car fare in Tacoma seven cents, approved by Tacoma city commissioners and city attorney.

No. 3137.

Puget Sound Traction Light & Power Company, Bellingham Division. To publish their passenger tariff No. 2, making street car fare in Bellingham six cents, approved by Bellingham city attorney.

No. 3138.

Drummond Lighterage Company. To publish rules authorizing absorption of switching charges.

No. 3139.

Pacific Northwest Traction Company. To publish freight rate for use of Carnation Milk Products Company.

No. 3140.

Lillico Transportation Company. To publish rules authorizing absorption of switching charges.

No. 3141.

Drummond Lighterage Company. To publish supplement authorizing absorption of its gridiron rate on all carloads transported by company between Bremerton and/or Ostrich Bay naval magazine and the Drummond lighterage landing at Seattle.

No. 3142.

Mountain States Power Company. To legalize a rate charge for two years.

No. 3143.

Port of Seattle. To change wharfage and storage rates, covering a reduction.

No. 3144.

Drummond Lighterage Company. To publish supplement authorizing absorption of gridiron rates.

No. 3145.

Port of Seattle. To publish rates, rules and regulations for wharfage service, contingent upon the adoption by the carriers of a similar provision in their tariffs.

No. 3146.

Puget Sound Navigation Company. To publish supplement No. 2 to freight tariff No. 6, covering reductions in rates on ice.

No. 3147.

Lillico Transportation Company. To publish supplement No. 1 to their tariff No. 5, cancelling all former quotations and contracts on freight in car-load lots between Seattle, Wash., and Bremerton, Wash., U. S. navy yard.

No. 3148.

Puget Sound Navigation Company. To publish rates covering reductions and restorations of other rates.

No. 3149.

Chesly Tug & Barge Company. To publish tariffs, one naming freight rates between Seattle and Bremerton, and the other naming freight rates between Seattle and the Ostrich Bay magazines.

No. 3150.

Drummond Lighterage Company. To publish tariff No. 7, to meet tariff of Puget Sound Navigation Company.

No. 3151.

Puget Sound Navigation Company. To publish supplement No. 4 to their tariff No. 6, on account of an error in their tariff No. 3.

No. 3152.

Merchants Transportation Company. Application to file new supplement on less than statutory notice denied on account of other carriers protesting.

No. 3153.

Ellisport Water Company. To file tariff No. 2, slightly increasing rates for water service at Ellisport. Petition signed by all consumers of company.

No. 3154.

Municipal Dock, City of Bellingham. To file wharf service tariff No. 1, covering new service.

No. 3155.

Chicago, Milwaukee & St. Paul Railway Company. Order permitting refund to Arthur D. Jones & Co., Spokane, Wash., for overcharge.

No. 3156.

Yakima Valley Transportation Company; Seattle & Rainier Valley Railway Company; Spokane, Portland & Seattle Railroad. To publish on Washington state traffic, the same demurrage charges as authorized in special permission No. 48001 of the Interstate Commerce Commission.

No. 3157.

All telephone companies in the State of Washington. General order of the Public Service Commission of Washington, authorizing telephone and telegraph companies to make application for continuance of rates as prescribed by the postmaster general.

No. 3158.

The Pacific Telephone & Telegraph Company. Permitting company to keep in effect rates as prescribed by the postmaster general.

No. 3159.

Home Telephone & Telegraph Company of Spokane. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3160.

Puyallup Valley Home Telephone Company. Authorizing publication of supplement reducing moving charge.

No. 3161.

Nickel Brothers Launch. Authorizing publication of supplement covering reduction in rates.

No. 3162.

Puyallup Valley Home Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3163.

Montesano Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3164.

Ohrner Telephone Company. Authorizing company to keep in effect rates as prescribed by postmaster general.

No. 3165.

Connell Land & Improvement Company. Authorizing company to keep in effect rates as prescribed by postmaster general.

No. 3166.

Camas Telephone & Telegraph Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3167.

Edmonds Independent Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3168.

Puget Sound Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3169.

Washington Coast Utilities. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3170.

The Interstate Utilities Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3171.

J. E. Hannegan, Agent. Authorizing publication of baggage tariff No. 25-2, W. P. S. C. No. 3.

No. 3172.

J. E. Fairbanks, Agent. Authorizing publication of uniform storage tariff as applicable with certain Washington rail carriers.

No. 3173.

Farmers Telephone & Telegraph Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3174.

Sunnydale Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3175.

Northwest Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3176.

Western Union Telegraph Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3177.

City Telephone Company of Sunnyside. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3178.

Valley Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3179.

Falls City Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3180.

Angeles Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3181.

Olalla Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3182.

Skamania Co-operative Telephone Association. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3183.

Oregon-Washington Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3184.

Outlook Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3185.

Neppel Telephone System. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3186.

Spangle Telephone Exchange. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3187.

Peoples Co-operative Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3188.

Davenport Independent Telephone Company. Application to continue in effect rates as prescribed by the postmaster general. Pending.

No. 3189.

Poulsbo Rural Telephone Association. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3190.

Sunnyside Telephone Company of Sunnyside. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3191.

Continental Telegraph Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3192.

Harstene Telephone Company. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3193.

The Creston Telephone Exchange. Authorizing company to keep in effect rates as prescribed by the postmaster general.

No. 3194.

Home Telephone Company of Castle Rock. Authorizing company to file supplement covering reduction on farmers' line.

No. 3195.

J. E. Hannegan, Agent. Authorizing publication special car and train tariff No. 28-4.

No. 3196.

Port of Seattle. Authorizing publication of wharfage and storage tariff on account of agreement with U. S. Railroad Administration relative to absorption of terminal charges on export and import tariff.

No. 3197.

Pacific Northwest Traction Company. Authorizing publication of special rate on cement.

No. 3198.

Kennewick Valley Telephone Company. Authorizing company to continue in effect rates as prescribed by the postmaster general.

No. 3199.

Washington Northern Telephone Company. Authorizing company to continue in effect rates as prescribed by the postmaster general.

No. 3200.

Pacific Northwest Traction Company. Authorizing publication of supplement No. 3 to their tariff No. 90, covering special rate on hog fuel for use of Carnation Milk Company.

No. 3201.

J. E. Hannegan, Agent. Authorizing publication of supplement 1 to baggage tariff 25-2.

No. 3202.

Puget Sound Navigation Company. Authorizing publication of special tariff covering reduction in round trip fare for officers and soldiers between Seattle and Port Townsend.

No. 3203.

Spokane International Railway Company. Authorizing cancellation their present demurrage tariff and publication of Fairbanks tariff authorized by director general's order 7-A.

No. 3204.

Yakima Valley Transportation Company. Authorizing cancellation their present demurrage tariff and publication of Fairbanks tariff authorized by director general's order 7-A.

No. 3205.

Spokane & Inland Empire Railroad Company. Authorizing cancellation their present demurrage tariff and publication of Fairbanks tariff authorized by director general's order 7-A.

No. 3206.

Port Townsend & Puget Sound Railroad. Authorizing cancellation their present demurrage tariff and publication of Fairbanks tariff authorized by director general's order 7-A.

No. 3207.

Walla Walla Valley Railway Company. Authorizing cancellation their present demurrage tariff and publication of Fairbanks tariff authorized by director general's order 7-A.

No. 3208.

North Pacific Public Service Company. Authorizing company to file supplement No. 5 to their tariff No. 4, covering reduction in lighting services for Bremerton, Charleston, Manette, Port Orchard and Waterman.

No. 3209.

Kitsap County Transportation Company. Authorizing publication of tariff providing commutation books between Seattle and Indianola Beach.

ORDERS PERMITTING REFUNDS.

(From December 1, 1918, to November 30, 1919.)

Orders permitting refunds were signed as follows:

No. 2085.

Chicago, Milwaukee & St. Paul Railway Company. Granting authority to protect rate of three cents per hundred pounds on wheat in carload lots from Sprague avenue to Spokane, Washington, between the dates of August 17, 1917, and December 27, 1917, inclusive.

No. 2086.

Oregon-Washington Railroad & Navigation Company. Granting authority to protect a rate of \$1.45 on logs, carload lots, minimum 7,000 feet, from Bleckson, Wash., to Bucoda, Wash., moving between the dates of August 4, 1917, and December 20, 1917, both dates inclusive.

MISCELLANEOUS ORDERS.

No. 1581.

In the Matter of the Application of the Chelan Electric Company for Extension of Time Within Which to Segregate Property and Accounts of the Water and Electric Departments of Said Company.

The following order was entered January 6, 1919:

On August 9, 1917, an order was entered by the Commission extending the time within which the Chelan Electric Company should segregate properties and accounts of the water and electric departments of said company for a period of two years from said date and application having been made to the Commission by said company for further extension of time within which to segregate such accounts, said Chelan Electric Company was allowed until and including the 30th day of September, 1918, within which to segregate such properties and accounts and it appearing that a further extension of time is desired,

It Is Ordered, That said Chelan Electric Company be, and it hereby is, allowed until and including the 30th day of September, 1920, within which to segregate the properties and accounts of its water and electric departments.

No. 4714.

Brooke M. Wright, et al., Complainants, v. Daniel Murray, Respondent.

This cause came on for hearing at Friday Harbor, January 24, 1919, at the hour of 10 o'clock a. m., before Commissioner Frank R. Spinning; there being present E. J. Forman, rate expert of the Commission, and A. E. Rotchford, stenographer. The complainant Brooke M. Wright, prosecuting attorney of San Juan county, represented himself and others. The respondent, Daniel Murray, was present.

Witnesses being sworn and examined, testimony taken, proof offered and the Commission being fully advised in the premises, makes the following

Findings of Fact.

I.

Some twenty-five (25) years ago the people residing about Deer Harbor built a community dock on said harbor on and over which all wharfage was free. About five (5) years after the construction of said dock, the same was transferred to a Mr. Stroudt, the consideration being that he should maintain and operate the same, charge a minimum of ten cents (10c) and twenty-five cents (25c) a ton for freight. In 1913 Mr. Stroudt transferred the wharf to Daniel Murray, the respondent. On March 24, 1914, the re-

spondent filed his W. P. S. C. Tariff No. 1, which became effective and contained the following rates:

All freight, not otherwise specified.....	per ton	\$0.25
Fruit in boxes.....	per box	.01
Hogs, dressed	each	.05
Horses and cattle, on foot.....	per head	.25
Minimum charge .....		.10

II.

September 2, 1918, the respondent files his W. P. S. C. Tariff No. 2 cancelling Tariff No. 1, which tariff became effective and carried the following rates:

Grain and mill feed.....	per ton	\$1.00
Hay, straw and bailed produce.....	per ton	1.00
Vegetables, sacked	per ton	1.00
Vegetables, boxed	per ton	1.00
Fruit, boxed or sacked.....	per ton	1.00
Horses, cattle, live.....	each	.50
Calves, live or dressed.....	each	.25
Hogs, live or dressed.....	each	.25
Household goods	per ton	1.00
General supplies	per ton	1.00
Automobiles	each	1.00
Minimum charge .....		.25
Storage charge after 24 hours.....	per day	.25

—the rates under said Tariff No. 2 being those challenged as unreasonable by the complainant.

III.

The probable value of the wharf of the respondent, including the land whereon the same is situated and the approach thereto, is one thousand four hundred dollars (\$1,400.00).

IV.

While the respondent has maintained no books and charged nothing against himself for the freight received by him over said wharf, the probable earnings of said wharf for all freight passing thereover under W. P. S. C. Tariff No. 1 were three hundred fifty-six dollars (\$356.00) per annum, while the operating expenses, including taxes and depreciation at ten per cent (10%) were approximately two hundred eighty-nine dollars (\$289.00), leaving a net return of sixty-seven dollars (\$67.00), or a rate of 4.8 per cent on one thousand four hundred dollars (\$1,400.00), the probable value of respondent's wharf, including land and approach to said wharf.

V.

Computing the freight moved over the wharf since the effective date of respondent's tariff No. 2 on the rates carried in said tariff, the results are as follows:

September, 1918	Increase	170%
October, 1918	Increase	208%
November, 1918	Increase	216%
December, 1918	Increase	164%, or
An average increase per month of.....		194.4%

VI.

In the vicinity of Deer Harbor, or at West Sound, Orcas and East Sound, there are docks charging a minimum of ten cents (10c) and twenty-five cents (25c) a ton wharfage and these docks by reason of the rates carried in respondent's tariff No. 2, are receiving freight which naturally should go over respondent's dock.

Opinion.

In view of the fact that respondent has kept no books or made a proper charge for all freight passing over his dock, and in view of the earnings under tariff No. 1, the Commission is of the opinion that the rates under tariff No. 2 are excessive and unreasonable.

Order.

Wherefore, It Is Ordered, That respondent's tariff No. 2 be, and the same is, hereby cancelled, and in lieu thereof the respondent shall immediately file with this Commission and put into effect as of date February 20, 1919, the following schedule of rates and charges:

All freight, not otherwise specified, per ton, weight or measurement whichever produces the greatest revenue	\$0.50
Minimum charge .....	.10
Fruit in boxes.....per box	.01
Hogs, dressed .....	.05
Horses and cattle, on foot.....per head	.25

It Is Further Ordered, That respondent shall keep proper records that the Commission may readily analyze his operating revenues and expenses.

It Is Further Ordered, That at the end of six months from the date of this order the respondent may apply to this Commission for a modification of this order.

Witness, The Public Service Commission of Washington, this 14th day of February, 1919.

No. 4726.

Seattle Grain Company, a Corporation, and Fisher Flouring Mills Company, a Corporation, Complainants, v. Port of Seattle, a Municipal Corporation, Respondent.

The complaint alleged discrimination in the disposal of storage facilities conducted by the Port of Seattle. The defense was a plea to the jurisdiction. A hearing was held at Seattle, November 23, 1918. The order entered, after reciting the appearances, was as follows:

Upon the objection of the Port of Seattle to the hearing of the matters complained of by the Public Service Commission of Washington on the ground that said Commission has no jurisdiction to entertain or hear the complaint, and has no jurisdiction of the respondent and requesting the Public Service Commission of Washington to resist and refrain from exercising any jurisdiction, and the Commission having heard the argument of counsel for the respondent and complainant upon said objection, and having considered the briefs counsel filed herein and being under date of December 18, 1918, advised as follows:

I have examined the transcript of argument and proceedings in the case of Seattle Grain Company et al. v. Port of Seattle, your number 4726, and the sup-

REPORT OF SAFETY INSPECTORS.

Olympia, Wash., November 20, 1919.

To the Public Service Commission of Washington, Olympia, Washington.

Gentlemen: The inspectors of tracks, safety appliances and electrical construction and maintenance for the Public Service Commission herewith submit a report of the duties performed from November 1, 1918, to November 1, 1919.

Fatal accidents investigated by inspectors are as follows:

Steam Railroads—

Employees	27
Passengers	0
Trespassers	26
Crossing accidents (automobiles).....	9
Crossing accidents (pedestrians).....	2

Street and Electric Roads—

Employees	3
Passengers	1
Trespassers	4
Crossing accidents (automobiles).....	4
Crossing accidents (pedestrians).....	1
Deaths from restricted clearances.....	0

Number of cars inspected, 18,375. Defects noted as follows:

Couplers out of contour.....	4
Knuckle pins broken.....	51
Lock block broken, couple inoperative.....	80
Uncoupling levers missing.....	3
Uncoupling chains kinked.....	16
Uncoupling chains broken.....	17
Couplers low	17
Couplers high	5
Ladders missing	2
End hand holds bent.....	29
Sill steps bent.....	12
Sill steps not sufficient clearance.....	1
Grab irons missing.....	25
Grab irons bent.....	260
Hand brakes inoperative.....	15
Air brakes cut out.....	27
Air brakes not operating.....	42
Release rods missing.....	17
Angle cock handles broken.....	20
Train pipes loose.....	10
Running board defective.....	21
Sharp flanges	3
Old air	105
	782

Engine Defects Noted—

Sharp flanges, driver.....	6
Sharp flanges, engine trucks.....	0
Sharp flanges, tank.....	2
Coupler low	2
Driving brake inoperative.....	1

Excessive piston travel.....	7	
Broken frame on tank truck.....	0	
Leaky piston rod packing.....	63	
Leaky valve stem packing.....	29	
Hand rail missing.....	0	
Hand rails improperly located.....	0	
		<hr/>
		110
Inspected—	1918	1919
Cars	13,517	18,375
Engines	1,401	1,432
Total defects	719	886
Switch blocks missing.....	299	273

List of Violations of Electrical Construction Rules Detected—

Rule No.	Violations
1	30
6	3
8	41
11	25
12	4
36, paragraph 2.....	2
36, paragraph 10.....	4
36, paragraph 11.....	48
36, paragraph 12.....	45
36, vertical clearance.....	48
	<hr/>
Total.....	250

Fatalities—

Employees	2
Other than employees.....	2
	<hr/>
Total.....	4

The track conditions within the state are generally good, the amount of maintenance done during the past year comparing favorably with the pre-war average. Approximately 95 miles of rails and 1,250,000 ties were renewed.

The average defects noticed in safety appliances on equipment was about the same as last year. Both 1918 and 1919 show an increase in defects over previous years, this being due mostly to the unusual number of cars from other lines being used in this territory under the consolidated method of handling cars. The home equipment of the railroads of the Pacific Northwest is generally newer and better maintained than that of the older eastern lines.

During the year 135 miles of additional territory has been protected by automatic block signals, 20 miles on the Northern Pacific, and 115 miles on the Great Northern. The Northern Pacific has also installed one new interlocking plant approaching the West Seattle line at the Duwamish river.

The Great Northern railway was the only trunk line within the state that had not in the past made extensive use of this well-proven safety measure, and it is very gratifying to see them come forward at this time with a substantial construction, which will help to safeguard the lives of employees and passengers.

During the year the Chicago, Milwaukee and St. Paul railway has electrified a great part of their main line within the state and the effects of the

transformation from steam to electric operation will furnish a study of great interest for the coming year. Electrification has been completed on 207 miles of track from Othello to Black River Junction and Tacoma, and four electric locomotives are already in use, two operating on the Saddle Rock mountains and two on the Cascade mountains, and others will be added as soon as available. Former steam locomotive engine men will handle these electric motors after careful instruction.

Locomotives for passenger service will be the gearless G. E. bi-polar type, having a total weight of approximately 265 tons and capacity sufficient to haul over the profile at a speed of 35 miles per hour a twelve-car passenger train weighing 950 tons. Freight locomotives will be provided by changing the gear ratio of the present passenger locomotives used on the Rocky Mountain and Missoula divisions.

The air brake equipment on the electric locomotives will be practically the same as that used on the railway company's steam locomotives, except of course that motor-driven compressors are used, each being of 150 cu. ft. capacity. Aside from the air brakes compressed air is also used for signals, whistles, bell-ringers, sanders, flange oilers, pantograph trolleys, part of the control equipment, and on the passenger locomotives for the oil-fired steam boilers.

Heating of passenger trains is accomplished by means of a flash boiler, fired with crude oil, similar to that used on the railway company's oil-fired steam locomotives.

In electrifying this district, overhead trolley construction, catenary type, with wood poles, is used. Bracket construction with poles on outside of curves is used for single tract except in cases of curves of short length, when, to avoid feeder crossing, span construction is used. Span construction is used for two or more tracks. In tunnels use is made of a four-inch horizontal steel channel, to which trolley catenary or feeder wires are attached by Crosby clips, channel suspended by two ten-inch disc insulators connected, in the case of a lined tunnel, to eyebolts in the roof, and in unlined tunnels where eyebolts are at different levels by means of strand wire. Trolley catenary or messenger is of one-half inch galvanized high strength steel seven-strand wire; messenger supports two 4/0 B. & S. grooved trolley wires, which hang side by side, there being a hanger alternately attached to either trolley wire every seven and one-half feet. Height of trolley above track rail is twenty-four feet and two inches. Trolley feeder is continuous from substation to the next and is tapped to the trolley wire at intervals of 1,000 feet; trolley and feeder sectionalized at beginning and end of every passing track by section switches mounted on poles.

Bonding:

Return circuit consists of 85-lb. or 90-lb. running rails and an auxiliary 4/0 B. & S. copper strand mounted on poles. Both rails of main line are bonded, and one rail of side tracks. One 250,000 C. M. bond is used per joint except on mountain grades (over one per cent) where two such bonds per joint is used. Bonds are of the pin type, exposed or concealed, depending on the character of the rail joint. The auxiliary 4/0 wire is intended to act as a temporary shunt circuit to the rails in case, through accident, the circuit through the rails should be interrupted. The substations in this

state are eight in number. The three most easterly substations, Taunton, Doris, and Kittitas, are equipped with apparatus manufactured by the Westinghouse Electric Manufacturing Company, and the substations on the Coast Division, i. e., Cle Elum, Hyak, Cedar Falls, Renton, and Tacoma Junction with apparatus manufactured by the General Electric Company. Interesting new features are the speed circuit breakers installed in the circuits of the undivided motor generator sets in the General Electric substations, and the so-called "Flash Suppressors" connected to each of the individual motor generators in the substations containing Westinghouse apparatus. The function of these breakers and suppressors is to limit the current flowing from the direct current generators in case of short circuit to the amount which can easily be handled by the regular switchboard breaker and which is not sufficient to cause flash-over. Another feature of interest is the addition of horn gap feeder switches outside the substation, installed in the direct current feeder circuit, so as to permit the cutting off at any substation the flow of current from adjacent substations in case of short circuit or trouble at the switchboard of the station in question. These switches are capable of opening a circuit carrying current of over 7,000 amperes at 3,000 volts.

Power will be supplied over two transmission lines, one running from the Long Lake plant of the Washington Water Power Company to the Taunton substation, and the other from the Puget Sound Traction, Light & Power Company to the Cedar Falls and Renton substations, these lines connecting with the substations mentioned, with the railroad's high tension tie line.

Automatic Block Signals:

The electrification of this territory has necessitated a change in the construction of the automatic block signals. The 3,000-volt D. C. propulsion current would interfere with the D. C. track circuit so it was necessary to install A. C. track circuits that would be immune to the effects of the D. C. propulsion. Also the view of the semaphore signals would be obstructed by trolley poles and arms, forcing the use of either a left-hand semaphore signal or a light signal, and the company has chosen and installed the latter which it is thought will prove very satisfactory. The light type signal requires less clearance than the semaphore signal and can be located inside the trolley poles where the view is less obstructed. Also the mountains generally make a good natural background for a light but a poor one for a semaphore, and on a short curve the indication of a light with deflecting prisms, spreading the light through a wide angle, can be more readily picked up by enginemen than could the indication of a semaphore.

The supply of current for the light signal is furnished from the substation at 4,400 volts A. C. 60-cycle circuit consisting of two No. 4 B. & S. wires. The main lamps illuminating these signals are 6-volt 28-watt. The main lamp behind the colors is burned at normal voltage, while those behind clear lenses are burned at 4 volts. Eight and one-half inch lenses are used with a hood over each one for protection and concentration. Three indications are given by most of the signals. The red unit giving the stop indication is located at the bottom; the green unit for the caution indication is in the middle, and the white unit for the clear indication is at the top. When

only two indications are required the unit not in use is covered with a blinder. A red marker lamp is provided on the left-hand side of the poles of automatic signals and on the right-hand side of home signals at interlocking plants. The above signals are manufactured by the Union Switch & Signal Company and is known as the Union A. C. color light automatic block signal.

Your inspectors do not like the colors used for indicators, especially the white, considering same a dangerous clear signal. The red may be shot out by some hunter or some boy who does not know the danger of so doing, and the indication would be a false clear signal. All other roads in this state use the colors as follows: Red, stop; green, proceed; yellow, caution. This leaves slight chance for a mistake, as should a lens be broken a white light would be displayed and under these circumstances would mean stop.

During the coming year your inspectors will watch with unusual interest the operations on the Chicago, Milwaukee & St. Paul system. The installation has been accomplished without serious accident, every known modern safeguard has been employed, and it is hoped that fatal accidents will be few.

Respectfully submitted,

J. F. REARDON, Chief Inspector.

T. S. McEACHRAN, Assistant.

DISPOSITION OF CASES INVOLVING ACCIDENTS OR WRECKS ON RAILWAYS OR OTHER PUBLIC UTILITIES.

FORMAL INVESTIGATIONS.

Investigations were conducted by the Commission or by the Inspector of Tracks and Safety Appliances in the following cases where fatal accidents occurred in or about public utilities, and orders based on such investigations were entered:

No. of Case	Date of Accident	Name of Utility	Place at or Near	Victim
4666	July 16, 1918	N. P. Ry.....	Puyallup.....	F. Welmers, section laborer.
4703	Sept. 20, 1918	O., M. & St. P. Ry. Co....	Carnation.....	James Ruff, engineer.
4704	Sept. 17, 1918	S., P. & S. Ry.....	Hoover.....	W. H. Carroll, brakeman.
4733	Sept. 20, 1918	S., P. & S. Ry.....	Fallbridge.....	S. L. Cowles, brakeman.
4736	Oct. 29, 1918	O., M. & St. P. Ry.....	Bandera.....	Frank Homrig, brakeman.
4746	Nov. 22, 1918	P. S. T., L. & P. Co.....	Seattle.....	N. O. Hughes, conductor.
4750	Dec. 7, 1918	O., M. & St. P. Ry.....	Tacoma.....	E. E. Book, brakeman.
4752	Nov. 3, 1918	G. N. Ry.....	Loon Lake.....	O. G. Halfhill, employe.
4753	Nov. 22, 1918	Pac. Tel. & Tel. Co.....	Seattle.....	John Engblom, carpenter.
5754	Dec. 11, 1918	Northern Pacific Ry.....	Tacoma.....	G. A. Waller, wiper.
4756	Nov. 29, 1918	Seattle Lighting Co.....	Seattle.....	W. B. Renthorn, elev. operator.
4755	Dec. 14, 1918	N. P. Ry.....	Ellensburg.....	Alfred Gay, engineer.
5757	Dec. 17, 1918	O., M. & St. P. Ry.....	Horrocks.....	Leo Stefan, laborer.
4761	Dec. 30, 1918	P. S. T., L. & P. Co.....	Seattle.....	F. Elpick, helper.
4764	Jan. 4, 1919	N. P. Ry.....	Hartford.....	E. Swanson, bridgeman.
4766	Jan. 11, 1919	N. P. Ry.....	Spokane.....	M. Tanaka, section laborer.
4769	Jan. 14, 1919	N. P. Ry.....	Easton.....	John Beal, laborer.
4771	Jan. 23, 1919	Tacoma Ry. & Pr. Co.....	Tacoma.....	K. L. Patrick, motorman.
4772	Jan. 23, 1919	Pac. Tel. & Tel. Co.....	Seattle.....	A. Cornell, splicer.
4776	Feb. 1, 1919	N. P. Ry.....	Fairfax.....	Wm. Reges, laborer.
4778	Feb. 10, 1919	N. P. Ry.....	Plumb.....	B. Evarian, laborer.
4783	Feb. 22, 1919	S., P. & S. Ry.....	Washougal.....	E. E. Goodwin, brakeman.
4794	Feb. 26, 1919	N. C. Power Co.....	Centralia.....	A. M. Greer, passenger.
4816	Apr. 24, 1919	N. P. Ry.....	Ellensburg.....	O. C. Wangeman, switchman.
4829	May 13, 1919	Olympia Lt. & Pr. Co.....	Olympia.....	I. J. Walters, lineman.
4834	May 27, 1919	N. P. Ry.....	Spokane.....	Wm. Fields, car inspector.
4840	June 20, 1919	N. P. Ry.....	Easton.....	Andrew Sansen, flagman.
4850	July 14, 1919	O.-W. R. & N. Co.....	Argo.....	E. Carter, inspector.
4851	July 22, 1919	O., M. & St. P. Ry.....	Tacoma.....	P. Cassidy, switchman.
4871	Aug. 9, 1919	S., P. & S. Ry.....	Snake River.....	E. A. Resdeg, engineer.
4887	Aug. 21, 1919	N. P. Ry.....	Orting.....	E. O. Hunter, fireman.
4890	Sept. 2, 1919	N. P. Ry.....	Skagit Jct.....	E. J. Woods, flagman.
4894	Aug. 20, 1919	P. S. T., L. & Pr. Co.....	Seattle.....	H. Morasch, lineman.
4896	Sept. 12, 1919	Spokane International Ry..	Spokane.....	J. W. Mack, switchman.
4905	Sept. 19, 1919	N. P. Ry.....	Ravensdale.....	Chas. Crowder, foreman.
4914	Oct. 14, 1919	O., M. & St. P. Ry.....	Othello.....	G. E. Gwiler, brakeman.
4916	Oct. 27, 1919	G. N. Ry.....	Spokane.....	P. Mullens, engineer.
4921	Nov. 5, 1919	O., M. & St. P. Ry.....	Spokane.....	A. F. Taylor, repairman.

ORDERS IN CASES CONCERNING CROSSINGS.

Action was taken on proposals for the elimination of dangerous grade crossings as follows:

No. 1771.

Commission v. Oregon-Washington Railroad & Navigation Company, Chicago, Milwaukee & St. Paul Railway Company and Spokane County Commissioners.

Dishman crossing on Appleway Highway. Pending.

No. 1966.

Town of Morton v. Tacoma Eastern Railroad Company.
Present crossing permitted to remain on condition view is improved.

No. 4867.

Town of Concrete v. Great Northern Railway Company.
Crossing at E street denied.

No. 4844.

Commission v. Chicago, Milwaukee & St. Paul Railway Company, et al.
Plan to eliminate dangers at Loveland crossing approved.

No. 4399.

Town of Ferndale v. Great Northern Railway Company.
Permit to continue grade crossing on Second street on condition signal system and lights be installed.

ORDERS PERMITTING GRADE CROSSINGS.

Orders permitting grade crossings were entered in the following cases:

No.	CASE	County	Sec.	Twp.	Range
4517	Walla Walla County vs. O.-W. R. & N. Co.....	Walla Walla.....	33	7 N.	33 E.
4519	Walla Walla County vs. O.-W. R. & N. Co.....	Walla Walla.....	32	7 N.	33 E.
4735	King County vs. Pacific Coast Company.....	King.....	33-34	24 N.	5 E.
4742	Jas. Allen, State Highway Commissioner, vs. Tacoma Eastern R. R.....	Lewis.....	26	15 N.	5 E.
4749	Three Lakes Lumber Co. vs. Snohomish County	Snohomish.....	3	28 N.	6 E.
4759	Thurston County vs. Puget Sound & Willapa Harbor Railway.....	Thurston.....	30	16 N.	2 W.
4773	Siems, Carey-H. S. Kerbauch Corp. vs. Clallam County.....	Clallam.....	35	31 N.	9 W.
4775	Pierce County vs. Northern Pacific Railway.....	Pierce.....	4	18	6 E.
4778	Benton County vs. O.-W. R. & N. Co.....	Benton.....	30	9	25 E.
4779	Benton County vs. O.-W. R. & N. Co.....	Benton.....	19	9	24 E.
4781	Benton County vs. N. P. Ry.....	Benton.....	30	9	25 E.
4782	C. M. & St. P. Ry. vs. Pend Oreille County.....	Pend Oreille.....	13	31 N.	45 E.
4791	Grant County vs. Northern Pacific Ry.....	Grant.....	13	22 N.	27 E.
4792	Deer Park Lumber Co. vs. Stevens County.....	Stevens.....	33	30 N.	42 E.
4807	N. P. Ry. Co. et al. vs. City of Enumelaw.....	King.....	24	20 N.	6 E.
4809	Yakima County vs. Northern Pacific Railway.....	Yakima.....	30	14 N.	18 E.
4811	Polson Logging Co. vs. Grays Harbor County.....	Grays Harbor.....	14	21 N.	10 W.
4813	Allen and Nelson Mill Co. vs. King County.....	King.....	12	24 N.	6 E.
4817	State Highway Commissioner vs. Northern Pacific Railway.....	Whitman.....	8	18 N.	45 E.
4821	Adams County vs. C. M. & St. P. Ry.....	Adams.....	17	17 N.	38 E.
4824	Cascade Timber Co. vs. Lewis County.....	Lewis.....	8	14 N.	5 E.
4828	Northern Pacific Ry. v. Walla Walla County.....	Walla Walla.....	28-29	11 N.	35 E.
4831	Pacific County vs. Willapa Elec. Co., N. P. Ry.....	Pacific.....	Pierce St.,	South Bend	
4832	Highway Commissioner vs. Great Northern Ry.....	Stevens.....	28	30	41 E.
4833	Highway Commissioner vs. N. P. Ry.....	Grays Harbor.....	12	1	8 W.
4837	Deer Park Lumber Co. vs. Stevens County.....	Stevens.....	23	2	39 E.
4835	Stimson Mill Co. vs. Grays Harbor County.....	Grays Harbor.....	15	1	5 W.
4845	Clallam County vs. Seattle, Port Angeles & Western Ry.....	Clallam.....	34		9 W.
4846	Northern Pacific Ry. Co. vs. City of Yakima.....	Yakima.....	"C" St.,	Yakima	
4847	Northern Pacific Ry. Co. vs. City of Yakima.....	Yakima.....	"D" St.,	Yakima	
4848	Northern Pacific Ry. Co. vs. City of Yakima.....	Yakima.....	Walnut St.,	Yakima	
4849	King County vs. N. P. Ry.....	King.....	10	21 N.	7 E.
4854	Peterson Bros. vs. King County.....	King.....	23	26	6 E.
4855	Northern Pacific Ry. vs. City of Kennewick.....	Benton.....	Yacoma St.,	Kennewick	
4858	Yakima County vs. Northern Pacific Ry.....	Yakima.....	9	8 N.	23 E.
4859	Yakima County vs. Northern Pacific Ry.....	Yakima.....	33	10 N.	21 E.
4860	Skagit County vs. Northern Pacific Ry.....	Skagit.....	14	35	4 E.
4861	Pierce County vs. O. M. & St. P. Ry.....	Pierce.....	8	18	3 E.
4862	Northern Pacific Ry. vs. Benton County.....	Benton.....	7	8	28 E.
4868	U. S. Spruce Production Corporation vs. Pacific County.....	Pacific.....	24	12 N.	10 W.
4864	U. S. Spruce Production Corporation vs. Pacific County.....	Pacific.....	30	12 N.	9 W.
4869	Northern Pacific Ry. vs. Town of Medical Lake.....	Spokane.....	Stanley St.		
4878	Simpson Logging Co. vs. Mason County.....	Mason.....	5	19 N.	6 W.
4879	Campbell Lumber Co. vs. King County.....	King.....	1-12	26 N.	5 E.
4880	Polson Logging Co. vs. Grays Harbor County.....	Grays Harbor.....	7	20 N.	10 W.
4886	City of Kelso vs. Northern Pacific Ry. Co.....	Cowlitz.....	Vine Street		
4892	Skagit County vs. Northern Pacific Ry. and P. S. & Casc. Ry.....	Skagit.....	11	34 N.	4 E.
4898	Yakima County vs. Northern Pacific Ry.....	Yakima.....	18	14	17 W.
4895	Northern Pacific Ry. Co. vs. Yakima County.....	Yakima.....	31-32	11 N.	18 E.
4897	Rucker Bros. vs. Snohomish County.....	Snohomish.....	33	29	6 E.
4898	Snohomish County vs. Northern Pacific Ry.....	Snohomish.....	34	27 N.	5 E.
4908	State of Washington vs. Great Northern Ry.....	Skagit.....	30	34 N.	4 E.
4910	Yakima County vs. Northern Pacific Ry. Co.....	Yakima.....	13-14	10 N.	20 E.
4911	Wallace Falls Timber Co. vs. County Comm. Snohomish County.....	Snohomish.....	9	27 N.	9 E.
4912	Camp Lewis Timber Co. vs. Pierce County.....	Pierce.....	34	19	1 E.
4913	Harstad Lumber Co. vs. Thurston County.....	Thurston.....	25	17 N.	1 E.
4920	Polson Logging Co. vs. Grays Harbor County.....	Grays Harbor.....	14	21 N.	10 W.
4925	Waite Mill and Timber Co. vs. Snohomish County.....	Snohomish.....	27	30 N.	7 E.
4982	Bloedel-Donovan Lumber Mills vs. Skagit County.....	Skagit.....	1	35 N.	4 E.

REPORTS OF GRAIN INSPECTION DEPARTMENT.

Because of the reorganization of the Grain Department in progress at the date of this report and the fact that three different individuals have been chief inspectors during the period covered, it has been decided to deviate from the usual form of preparing a report.

As indicated in the 1918 report of this Commission, the legislature of 1919 was requested to make a number of changes in the grain inspection act. The chief purposes of the proposed changes sought by the Commission were to enable the Commission to pay salaries to the employees of the department in an amount sufficient to secure the retention of efficient inspectors, samplers and weighers and also to remove legislative restrictions upon the maximum fees to be fixed for the work in order to enable the department to be self-supporting.

The Commission in submitting its bill to the legislature, recognized a growing commerce with the Orient and the necessity of fixing state standards for such imports, so included in the proposed measure provision for the weighing and sampling and the providing of standards for jute, rubber, soya beans and a number of other commodities.

During the legislative session the question was raised whether or not the department should be transferred from the Public Service Commission to the Commissioner of Agriculture. The discussions this involved delayed final consideration of the bill until the latter days of the session. When the bill finally passed amendments were made which fixed maximum fees which could be charged, but the bill itself removed the limitations upon salaries that might be paid. However, in the closing hours of the session the appropriation bill which covered the department was so framed as to limit the salaries that might be paid the chief deputies at Seattle, Tacoma and Spokane.

The appropriation bill also carried a proviso that approximately \$10,000 advanced in excess fees by the grain interests and disbursed in extra compensation to Grain Department employees, should be repaid to those who made the advances, but that such repayment must be charged against the receipts of the department.

This limitation of fees that might be charged and the need of meeting this extra \$10,000 charge, has resulted in a serious financial situation with respect to the department and at the time the report is prepared, the question has arisen whether the receipts, under the limitation of fees, are going to be sufficient to continue the work during the balance of the biennium.

The new grain law carried an emergency clause and became effective March 20, 1919, when signed by Governor Hart.

At a regular meeting of the Commission held at Olympia on that day, the following resolution was adopted:

Whereas, The Legislature of 1919 passed chapter 189 relative to fraud in the hay and grain trade, etc., which act was approved by the Acting Governor, March 20, 1919, and by the terms of such act the same became effective March 20, 1919; and

Whereas, Under and by virtue of the terms of said act The Public Service Commission of Washington is authorized to appoint a chief inspector and to approve appointments made by the chief inspector of other employees; and

Whereas, Under the terms and provisions of such act the Commission is required to fix fees for inspecting, grading and weighing of the commodities included in the provisions of the act which fees shall not exceed six cents (6c) a ton for sacked grain, four cents (4c) a ton for bulk grain, and twelve cents (12c) for hay; and

Whereas, It appears to the Commission from the report this day filed by P. J. Sweeney, chief grain inspector, that the anticipated revenues in the grain department under the maximum fees fixed by the statute will not increase the aggregate fees more than twenty-five per cent (25%) over those of the present biennium; and

Whereas, It appears that the pay of employees must be increased an average of thirty-five per cent (35%) of the amounts of salaries heretofore allowed by law;

Now Therefore, It Is Ordered, That P. J. Sweeney of Tacoma be and hereby is appointed chief inspector, under the provisions of such act, at a salary of \$2,000 per annum until April 1, 1919, and at a salary of \$2,400 per annum thereafter; that the appointments by the chief inspector of J. J. Geehan, chief deputy inspector at Tacoma; James Cunningham, chief deputy inspector at Seattle; and L. D. Crowe, chief deputy inspector at Spokane, at a salary of \$125.00 per month each to April 1, 1919, are approved; and that the appointments of the following named employees at salaries named to April 1, 1919, be and are approved:

P. J. Ton, chief clerk and registrar.....	\$125 00
T. F. Sweeney, inspector.....	100 00
C. J. Ward, inspector.....	100 00
W. E. Coats, inspector.....	100 00
W. S. Kennedy, inspector.....	100 00
J. R. Boyle, inspector.....	100 00
R. W. Maloney, inspector.....	100 00
S. Thorson, inspector.....	100 00
E. Shafer, inspector.....	100 00
I. A. Curren, inspector.....	100 00
R. H. Todd, chief clerk and registrar.....	125 00
R. P. Cunningham, inspector.....	100 00
G. B. Kneeland, inspector.....	100 00
F. V. Hyman, inspector.....	100 00
J. W. Reed, inspector.....	100 00
M. G. Jones, inspector.....	100 00
P. K. Peterson, inspector.....	100 00
R. C. Snyder, inspector.....	100 00
O. A. North, inspector.....	100 00
O. S. Prickett, inspector.....	100 00
M. R. Kelley, stenographer.....	80 00
Elizabeth O'Hearn, stenographer.....	100 00
Rollo C. Harboard, inspector.....	100 00
Earle V. White, inspector.....	30 00
David Gorman, inspector.....	100 00

It Is Further Ordered, That the fees for inspecting, grading and weighing grain and hay shall be six cents (6c) a ton for sacked grain, four cents (4c) a ton for bulk grain and twelve cents (12c) a ton for hay.

March 26, 1919, following a conference with the chief inspector and employees of the department, the following resolution was adopted:

That the salaries of the chief deputy inspectors for the period beginning April 1, 1919, be and are fixed at \$1,800.00 per annum; that the salary of the chief clerk and registrar at Tacoma be and is fixed at \$1,800.00 per annum; that Chief Inspector Sweeney be and is authorized to fix the salaries of the other employees of the department at sums ranging from \$80.00 to not to exceed \$150.00 per month on individual approval by the commission.

That, under the provisions of section 13, chapter 189, Laws of 1919, it is ordered that at inspection points at places therein other than public terminal warehouses, the actual cost of such inspection (in no instance less than the reg-

ular fees) shall be charged and in case the actual cost exceeds the regular fees, the difference shall be charged to and collected from the consignee or assignee requesting the service.

That, under the provisions of section 26, chapter 189, Laws of 1919, it is ordered that when inspection is requested at other than inspection points, a charge shall be made to cover the time of inspector and, if necessary, traveling expenses, which charge shall be collected from the person asking inspection.

It Is Further Ordered, That the fees for out inspection shall be as follows: For weighing grain from a public terminal warehouse, lots of less than 500 tons 5c per ton, in lots of 500 tons and over, 4c per ton. Where inspection and weighing are demanded, the fee for the combined service shall be 1c additional to the amount above provided for weighing.

It Is Further Ordered, That any rules or regulations heretofore adopted by the Commission providing other or different fees than those herein enumerated, be and are hereby set aside.

On July 14, 1919, C. J. Holst, who had formerly occupied the position, was appointed Chief Grain Inspector, succeeding P. J. Sweeney; and on November —, 1919, L. D. Crowe, who had been employed four years as chief deputy at Spokane, was appointed Chief Grain Inspector, to succeed Mr. Holst.

FINANCIAL STATEMENT, GRAIN DEPARTMENT.

	1917 Biennium Appropriation	Disbursed to November 30, 1917	Disbursed December 1, 1917, to March 31, 1919	Balance Reverting to General Fund	1919 Biennium Appropriation	Disbursed April 1, 1919, to November 30, 1919	Balance Unspent
Salaries and Wages—							
Chief inspector	\$4,000 00	\$1,333 32	\$2,666 68		\$4,800 00	\$1,600 00	\$3,200 00
Chief clerk	3,000 00	1,000 00	2,000 00		3,600 00	1,200 00	2,400 00
Chief deputy, Tacoma	3,000 00	1,000 00	2,000 00		3,600 00	1,200 00	2,400 00
Chief deputy, Seattle	3,000 00	1,000 00	2,000 00		3,600 00	1,200 00	2,400 00
Chief deputy, Spokane	3,000 00	1,000 00	2,000 00		3,600 00	1,200 00	2,400 00
Other salaries and expenses	90,000 00	20,849 35	70,370 43	\$2,159 39	125,000 00	32,560 77	92,439 23
Refund, grain trust fund (from col- lections)					10,000 00	9,980 24	9 76
Printing (general fund)	1,500 00	1,129 36	370 64		1,500 00	1,500 00	
Supplies, material and service							

Total Grain Department collections, December 1, 1918, to November 30, 1919..... \$43,905 42
 Total Grain Department collections April 1, 1919, to November 30, 1919..... 36,651 86
 Net surplus this biennium..... 4,251 21

Tacoma, Dec. 13, 1919.

Respectfully submitted,
 L. D. CROWE,
 Chief Grain Inspector.

FORMAL CASES PENDING.

Following is a list of all formal cases which have been instituted before the Commission and which had not been finally determined November 30, 1919:

<i>Case No.</i>	<i>Case</i>
1756	Public Service Commission v. Puget Sound Electric Co. Crossing.
1775	Public Service Commission v. Whitman County et al. Crossing.
1979	Ferry County v. Great Northern Railway. Crossing.
1808	Seattle and Rainier Valley Railway. Valuation.
4551	Electric Logging Co. v. Tacoma Eastern Railroad Company. Refund.
4578	Centralia Commercial Club v. Northern Pacific Railway et al. Phy. Conn.
4644	Nestos Timber Company v. Northern Pacific Railway. Refund.
4651	Pierce County v. Northern Pacific Railway. Crossing.
4673	Citizens Club of Chehalis v. Northern Pacific Railway et al. Joint rates.
4808	City of Toppenish v. Northern Pacific Railway. Crossing.
4812	Commission ex rel. Everett Commercial Club v. City Dock. Rates.
4819	Public Service Commission v. Liberty Lake Company. Valuation.
4838	C. D. Mitchell et al. v. Horn Rapids Irrigation Company. Rates.
4843	Commission v. South Prairie Water Company. Rates.
4865	Clarkston Chamber of Commerce v. Lewiston-Clarkston Transit Company. Street car rates.
4868	Commission v. Issaquah Water Company. Rates and service.
4874	Seattle, Port Angeles & Western Ry. v. City of Port Angeles. Crossing.
4875	Seattle, Port Angeles & Western Ry. v. City of Port Angeles. Crossing.
4876	Seattle, Port Angeles & Western Ry. v. City of Port Angeles. Crossing.
4888	Accident Washington Water Power Company at Palouse, Wash.
4889	Accident on Northern Pacific Railway, Carrolls, Wash.
4891	Adams County v. C. M. & St. P. Ry. Under crossing.
4901	Commission ex rel. City of Seattle v. Seattle Lighting Company. Service.
4902	Commission ex rel. City of Seattle v. Pacific Tel. & Tel. Co. Service.
4904	Commission v. Attalia Dairy Products Company. Service.
4906	Commission et al. v. McPherson Bros. Co. Ferry rates.
4909	Union Warehouse & M. Co. v. Great Northern Railway. Facilities.
4915	Accident Northern Pacific Railway at Byron, Wash.
4918	Commission et al. vs. Sound Tel. & Tel. Co. Rates.
4919	Application Northern Pacific Railway for classification of property.
4922	Accident Northern Pacific Railway, Hazel, Wash.
4923	Commission v. Inter Island Tel. & Tel. Co. Rates.
4924	North Coast Power Company. Valuation.
4926	Commission v. Northport Ferry. Rates.
4927	Commission v. Marcus Ferry. Rates.
4928	Lewis County v. West Fork Logging Company. Crossing.
4928	Lewis County v. C. M. & St. P. Ry. Crossing.
4930	Snohomish County v. Pacific Northwest Traction Company. Crossing.
4931	Commission et al. v. Great Northern Ry. Elimination dangerous crossing.

INFORMAL COMPLAINTS AND THEIR DISPOSITION.

When complaints are received against public service utilities where it seems possible by correspondence to settle the cause of complaint promptly, and at the same time save the expense of a formal hearing, these complaints are entered as "Informal Complaints."

During the year covered by this report there were 342 such informal complaints brought to the attention of the Commission, being those numbered from 3419 to 3761, inclusive.

Below will be found, in condensed form, a statement showing disposition of those cases that were pending December 1, 1918, the date of the last prior report (being cases numbered up to 3419), and a list of the new informal complaints filed the past year and their present status:

No. 2407. C. S. Stone (Hamilton) v. Great Northern Railway Company. Lighting Station. Closed.

No. 2473. In re Block Signals on Spokane, Portland & Seattle Railway. Closed. Improved.

No. 2585. Gas and water rules. Pending hearing.

No. 2586. Electric company rules. Pending hearing.

No. 2587. Demurrage rules. Closed.

No. 2724. Garden City Grange (Snohomish) v. Puget Sound Telephone Company. Rates. Closed. Lack of prosecution.

No. 2727. Milwaukee Grain Elevator Company (Seattle) v. Railways. Switching facilities. Pending.

No. 2735. J. M. Hoff (Vancouver) v. Northern Pacific Railway Company. Facilities at Knapps Siding. Closed. Conditions remedied.

No. 2752. Charles H. Lilly & Co. (Seattle) v. Great Northern Express Company. Closed.

No. 2788. G. E. Conn (Tumwater) v. Northern Pacific Railway Company. Reloading charge. Closed.

No. 2798. Commission v. Railways. Rules on clearances. Pending resumption of private ownership.

No. 2802. Brotherhood of Railway Trainmen v. Railways. Clearances. Pending resumption of private ownership.

No. 2826. Commission v. Brattle-McClelland Mill Company (Ridgefield). Violation of electric code. Closed. Violation corrected.

No. 2898. Chas. H. Steffen (Seattle) v. Riverton Water Company. Impure water. Closed.

No. 2919. Council of Ilwaco v. North Shore Light & Power Company. Excessive and unjust charges. Closed.

No. 3004. R. S. Fuller (Castle Rock) v. Silver Lake Railway & Lumber Company. Switching charges. Closed.

No. 3015. Sumner Iron Works (Everett) v. Puget Sound Telephone Company. Service. Closed.

No. 3144. Commission v. Mountain States Power Company. Violation of electric code at Northport. Closed. Violation corrected.

No. 3167. Commission v. Grant County Power Company. Violation of electric code at Coulee City. Pending investigation.

No. 3186. Sherwin-Williams Company (Cleveland) v. Northern Pacific Railway. Refusal to accept shipment for delivery at Spokane. Closed.

No. 3194. Raymond E. Lane (Molson) v. Great Northern Railway Company. Fencing right-of-way. Closed. Fence constructed.

No. 3204. R. N. Clifford (Elma) v. Stimson Mill Company. Refusal to give service. Closed. Transferred to formal hearing No. 4687.

No. 3213. Investigation death of Mrs. J. I. Johnson, May 27, 1918, at Willapa on line of Puget Sound & Willapa Harbor Railway. Closed. Investigated.

No. 3228. Bilrowe-Alloys Company (Tacoma) v. Great Northern Railway Company. Overcharge. Closed.

No. 3239. South Central Rural Telephone Association (Tumwater) v. Pacific Telephone & Telegraph Company. Service. Closed. Conditions remedied.

No. 3243. S. B. Jessup (Spokane) v. Great Northern Express Company. Non-delivery of handbag shipped from Camp Dix, New Jersey. Closed.

No. 3247. Mount Vernon Cream Company (Seattle) v. Great Northern Railway Company. Overcharge on shipment. Closed.

No. 3254. American Audit Company (Spokane) v. Great Northern Railway Company. Overcharge on carload of pulp wood. Closed.

No. 3262. Wenatchee North Central Fruit Distributors (Wenatchee) v. Great Northern Railway. Overcharge on shipment of pigs. Closed. Refund made.

No. 3263. F. A. Baumann (Walla Walla) v. Northern Pacific Railway Company. Overcharge on lumber. Closed. Complaint withdrawn.

No. 3283. Citizens of Oroville v. Great Northern Railway. Station facilities. Closed. Conditions remedied.

No. 3287. Citizens of Tenino v. North Coast Power Company. Extension of water mains. Closed.

No. 3290. Patrons of the Winona Telephone Company v. Pacific Telephone & Telegraph Company. Long distance connection. Closed.

No. 3299. Harry Williams (Sumner) v. Pacific Telephone & Telegraph Company. Application for service. Closed. Service installed.

No. 3300. R. G. Poland (Helena, Mont.) v. Northern Pacific Irrigation Company (Kennewick). Collecting for service not furnished. Closed. No jurisdiction.

No. 3302. Northport Smelting & Refining Company (Republic) v. Spokane & British Columbia Railway. Refund of demurrage charges. Closed. No jurisdiction.

No. 3303. Clara P. Stevens (Long Beach) v. Northern Express Company. Claim for damage to sewing machine. Closed.

No. 3304. Henry Pickard Company (Seattle) v. Northern Pacific Railway Company. Damage to sample trunks. Closed. Settled.

No. 3308. Martin Tank (Spokane) v. Pacific Telephone & Telegraph Company. Failure to secure service. Closed. Service promised.

No. 3310. Washington Brick, Lime & Sewer Pipe Company (Spokane) v. Great Northern Railway. Rates on clay. Closed. Lack of prosecution.

No. 3316. W. H. Stivers (East Seattle) v. Meerscheldt Water System. Service. Closed by agreement.

No. 3319. McDonald, Hale & Co. (Seattle) v. Chicago, Milwaukee & St. Paul Railway Company. Claim for repairing doors on wheat cars. Closed.

No. 3327. Charles F. Bailey (Granger) v. Northern Pacific Railway Company. Drinking water in depot. Closed.

No. 3332. Seattle Grain Company (Seattle) v. Port Commission. Refusal to accept grain. Closed. No jurisdiction.

No. 3333. Krupp Telephone Company (Krupp) v. Pacific Telephone & Telegraph Company. Refusal to transmit toll messages. Closed.

No. 3336. People's Co-operative Telephone Company (Gate) v. Pacific Telephone & Telegraph Company. Toll line connection. Closed. Lack of prosecution.

No. 3337. Martinolich Shipbuilding Company (Dockton) v. Pacific Telephone & Telegraph Company. Service. Closed. Service improved.

No. 3338. F. Fischer (Camp Lewis) v. Tacoma Gas Company. Meter charges. Closed. Tariff rate charged.

No. 3343. John Gourley (Seattle) v. Oregon-Washington Railroad & Navigation Company. Inability to divert cars. Closed. No jurisdiction.

No. 3347. Brooke M. Wright (Friday Harbor) v. Daniel Murray. Increase in dock charges. Closed. Transferred to formal hearing No. 4714.

No. 3352. Imperial Fir Lumber Company, Inc. (Bellingham) v. Bellingham & Northern Railway. Rate on logs. Closed. No jurisdiction.

No. 3357. W. D. Finley (Spokane) v. Spokane Falls Gas Light Company. \$5.00 deposit. Closed.

No. 3358. Elbe Lumber & Shingle Company (Elbe) v. Railroads. Installation of scales. Closed. Lack of prosecution.

No. 3359. F. J. Fleischer (Prescott) v. Pacific Power & Light Company. Electric service. Closed.

No. 3361. A. J. Stewart (Aberdeen) v. Pacific Telephone & Telegraph Company. Phone extension. Closed.

No. 3362. C. A. Cady (Tacoma) v. Pacific Telephone & Telegraph Company. \$5.00 readiness to serve charge. Closed.

No. 3365. A. Bugge (Port Williams) v. Puget Sound Navigation Company. Steamer "Solduc" discontinued. Closed. No formal complaint filed.

No. 3368. E. C. Burlingame (Walla Walla) v. Railroads. Car shortage. Closed.

No. 3370. United Copper Mining Company (Spokane) v. Great Northern Railway Company. Rate on ore. Closed.

No. 3371. Silver Basin Mining Company (Davenport) v. Phoenix Lumber Company. Filing of tariffs. Closed. Lack of prosecution.

No. 3374. Citizens of Milton v. Tacoma Railway & Power Company. Increased rates. Closed. Satisfactorily adjusted.

No. 3375. Citizens of Pasco v. Pacific Power & Light Company. Unhealthful water. Closed.

No. 3376. Mrs. James Lytle (Hoquiam) v. Grays Harbor Railway, Light & Power Company. Electric service. Closed. Lack of prosecution.

No. 3377. A. P. Gaillier (Tacoma) v. Pacific Telephone & Telegraph Company. Failure to secure service. Closed. Service secured.

No. 3381. Pacific Coast Shippers' Association (Seattle) v. Northern Pacific Railway. Rate on logs. Closed.

No. 3382. Pacific Coast Shippers' Association (Seattle) v. Great Northern Railway. Refund on ticket. Closed. Ruling made.

No. 3383. James Kiefer (Seattle) v. Seattle Lighting Company. Re-reading of meter. Closed.

No. 3384. Residents of Washougal v. Washougal Water Company. Water supply. Closed.

No. 3385. Residents of Vancouver v. Portland Railway, Light & Power Company. Inability to secure light service. Closed.

No. 3386. Dyer Bros. Co. (Beverly) v. Chicago, Milwaukee & St. Paul Railway. Station facilities at Smyrna. Closed. Station rebuilt.

No. 3387. J. M. Hoff (Ridgefield) v. Western Union. Non-delivery of messages. Closed. Refund made.

No. 3389. Tacoma Lumber Company (Tacoma) v. Northern Pacific Railway Company. Demurrage. Closed. Transferred to formal hearing No. 4767.

No. 3390. J. H. Sexsmith (Metaline Falls) v. Bailey & Nelson. Ferry rates. Closed. Lack of prosecution.

No. 3392. O. J. Foster (Walla Walla) v. Pacific Power & Light Company. \$125.00 deposit. Closed. Lack of prosecution.

No. 3394. Town of Waterville v. Wenatchee Valley Gas & Electric Company. Transmission line unsafe. Closed. Repairs made.

No. 3395. Yakima Motor Inn (Yakima) v. Pacific Power & Light Company. Power service. Closed. Lack of prosecution.

No. 3396. Investigation death of Miss Clara Olson, November 6, 1918, Tacoma, on line of Tacoma Railway & Power Company. Closed. Investigated.

No. 3397. Investigation death of Harry Henderson, November 6, 1918, Burnett, on line of Northern Pacific Railway. Closed. Investigated.

No. 3398. John P. Fay (Seattle) v. Pacific Telephone & Telegraph Company. Installation. Closed.

No. 3399. Mrs. C. H. Manners (Underwood) v. Northwestern Electric Company. Service. Closed.

No. 3400. Oregon-Washington Telephone Company v. Pacific Telephone & Telegraph Company. \$3.00 connecting charge. Closed. Tariff charge made.

No. 3401. F. N. Easton (Chambers Prairie) v. Oregon-Washington Railroad & Navigation Company. Non-delivery of household goods. Closed. Goods delivered.

No. 3403. A. D. Foster (Bellingham) v. Pacific Telephone & Telegraph Company. Installation refused. Closed. Ruling made.

No. 3405. Investigation death of George C. Stanke, November 12, 1918, at Everett, on line of Northern Pacific Railway. Closed. Investigated.

No. 3406. Investigation death of Calvin Conrad, November 15, 1918, East Hobart Station, on Pacific Coast Railway. Closed. Investigated.

No. 3407. Residents of Mima v. Northern Pacific Railway. Rebuilding of depot and train (No. 421) stop. Closed. Depot rebuilt and train No. 421 stops on flag.

No. 3408. St. Paul & Tacoma Lumber Company (Tacoma) v. Northern Pacific Railway Company. Demurrage. Closed. No power to grant relief.

No. 3409. David Stuart (Seattle) v. Pacific Northwest Traction Company. Switching. Closed. Lack of prosecution.

No. 3410. Louis Gilbert (Seattle) v. Pacific Telephone & Telegraph Company. Refund. Closed. Refund made.

No. 3412. Investigation death of Peter Swartz, November 18, 1918, at Elwha station, on line of Seattle, Port Angeles and Western. Closed. Investigated.

No. 3413. Elmer S. Smith (Centralia) v. Eastern Railway & Lumber Company (Centralia). Common carrier privileges. Closed.

No. 3414. Investigation death of W. S. Spellberger, November 20, 1918, Tacoma, on line of Chicago, Milwaukee & St. Paul Railway. Closed. Investigated.

No. 3415. Henry A. Daubert (Buckley) v. McNeely Logging Company. Operating train without headlight. Closed. No jurisdiction.

No. 3416. F. W. Tempes (Vancouver) v. North Coast Power Company. Main connection. Closed.

No. 3417. J. W. Doughty (Sedro Woolley) v. Great Northern and Northern Pacific railways. Excessive rate on car of coal. Closed. Overcharge refunded.

No. 3418. J. M. Russell (Joyce) v. Siems-Carey and H. S. Kerbaugh Corporation. Violating train rules. Closed. Violation discontinued.

No. 3419. Commission v. Puget Sound Traction, Light & Power Company. Violation electric code. Closed. Violation corrected.

No. 3420. J. P. Guerrier Lumber Company (Forest) v. Newaukum Valley Railroad Company. Excessive rate for switching. Closed. Lack of prosecution.

No. 3421. Investigation death of Robert Cavette, December 12, 1918, Seattle, Seattle Lighting Company. Closed. Investigated.

No. 3422. Investigation death of William Kay, December 11, 1918, at South Bend on line of Northern Pacific Railway. Closed. Investigated.

No. 3423. J. E. Brown (Nooksack) v. Sumas Electric Company. Refusal to furnish service. Closed.

No. 3424. Roberts & Chichester (Seattle) v. Pacific Telephone & Telegraph Company. Installation. Closed. Phone installed.

No. 3425. Louis Clifton (Roy) v. Roy Electric Company. Failure to furnish service. Closed.

No. 3426. J. Y. C. Kellogg (Seattle) v. Pacific Telephone & Telegraph Company. Installation charge. Closed. Satisfactorily adjusted.

No. 3427. Edward Miller Cornice & Roofing Company (Tacoma) v. Pacific Telephone & Telegraph Company. Installation. Closed. Service rendered.

No. 3428. Residents of Washougal v. Camas & Washougal Telephone Company. Service. Closed. No jurisdiction.

No. 3429. Board of Public Works (Bellingham) v. Bellingham & Northern. Grade crossing protection. Closed. Protection installed.

No. 3430. R. N. Sturdevant et al. (Dayton) v. Pacific Power & Light Company. Installation charge. Closed.

No. 3431. Mrs. E. Hyndman (Olympia) v. Pacific Telephone & Telegraph Company. Installation. Closed. Phone installed.

No. 3432. H. E. Jones (Wilbur) v. Seaton Ferry. Overcharge for ferry service. Closed. Transferred to formal hearing No. 4787.

No. 3433. W. Butler et al. (Skamania) v. Oregon-Washington Telephone Company. Service. Closed. Adjusted.

No. 3434. Mr. Ness (Edgecomb) v. Northern Pacific Railway Company. Culvert. Closed. No jurisdiction.

No. 3435. H. C. Wallace (Winslow) v. Eagle Harbor Transportation Company. Overcharge on freight shipment. Closed. Adjusted.

No. 3436. John Albin (Seattle) v. Pacific Telephone & Telegraph Company. Installation. Closed. Service rendered.

No. 3437. Elizabeth O'Connor (Everett) v. Puget Sound International Railway & Power Company. Excessive bill. Closed. Investigated.

No. 3438. N. D. Tower (Morton) v. Morton Telephone Company. Increase in rates. Closed.

No. 3439. Boston-Okanogan Apple Company (Boston) v. Great Northern Railway Company. Overcharge on apple shipment. Closed.

No. 3440. Investigation death of Walter Stocks, December 9, 1919, at Mabton on line of Northern Pacific. Closed. Investigated.

No. 3441. Patrons (Yakima County) v. Valley Telephone Company. Increase in rates. Closed. No jurisdiction.

No. 3442. Mrs. M. H. Giberson (Milton) v. Town of Milton. Water service. Closed. Adjusted.

No. 3443. W. M. Jenkins (Sultan) v. Northwest Telephone Company. Disconnected from farmer line. Closed.

No. 3444. Investigation death of Roy Buckley, December 25, 1918, at Ballard on line of Great Northern Railway. Closed. Investigated.

No. 3445. Frank H. Plont (Marysville) v. Great Northern Railway. Overcharge on shipment of coal. Closed. Charge in accordance with tariff.

No. 3446. Elbert M. Chandler (Yakima) v. Northern Pacific Railway. Overcharge on shipment of stock. Closed. Tariff rate charged.

No. 3447. Fred G. Cooper (Walla Walla) v. Pacific Power & Light Company. Exorbitant reconnecting charge. Closed.

No. 3448. C. L. Thorn (Crawford) v. American Railway Express Company. Overcharge on shipment of Belgian hares. Closed. Tariff rate charged.

No. 3449. W. D. Carrier (Olympia) v. Union Pacific System. Overcharge on posts from Lacey to Olympia. Closed. Refund made.

No. 3450. Investigation death of Charles Benedict, January 2, 1918, at Tenino, on Great Northern Railway. Closed. Investigated.

No. 3451. Columbia Shingle Company (Kelso) v. North Coast Power Company. Power contract. Closed. Data furnished.

No. 3452. E. A. Loertscher (Elma) v. Cloquallum Telephone Company. Service. Closed. No jurisdiction.

No. 3453. Glenn L. Hoyt (Vancouver) v. Portland Railway, Light & Power Company. Electric service. Closed. Service installed.

No. 3454. Henry Mossbach Automobile Company (Seattle) v. Pacific Telephone & Telegraph Company. Installation. Closed. Complaint withdrawn.

No. 3455. A. S. Slusher et al. (Spokane) v. Fred A. Wendt. Water service on Irvington Heights. Closed.

No. 3456. Collision on Northern Pacific Railway at Ellensburg, December 16, 1918. Closed. Investigated.

No. 3457. F. E. Semon (Port Angeles) v. A. I. Filion and F. F. Miller. Unsafe dock. Closed. Conditions remedied.

No. 3458. A. C. Allen (Camas) v. Camas & Washougal Telephone Company. Toll charge of five cents for local calls. Closed. No jurisdiction.

No. 3459. Otto Juckeland (Spokane) v. Home Telephone Company. Long distance call improperly charged. Closed.

No. 3460. J. B. Jones (Oroville) v. Pacific Telephone & Telegraph Company. Connection with East Okanogan wires. Closed.

No. 3461. Town Council of Fairfield v. Enloe Electric Company. Service. Closed.

No. 3462. Citizens of Leavenworth v. Tumwater Light Company. Rates and service. Closed. Transferred to formal hearing No. 4770.

No. 3463. F. W. Moore et al. (Bremerton) v. Port Orchard-Bremerton Ferry. Disregarding schedule time. Closed. Adjusted.

No. 3464. West Waterway Lumber Company (Seattle) v. U. S. Railway Administration, Tariff No. 7. Excessive switching rate. Closed. Lack of prosecution.

No. 3465. L. G. Feyen (Seattle) v. Pacific Telephone & Telegraph Company. Extension on trunk line. Closed. Complainant satisfied.

No. 3466. E. W. Gelino (Riverton) v. Riverton Water Company. Service. Closed.

No. 3467. Edward J. Harvey (Seattle) v. Seattle Lighting Company. Multiplicity of bills. Closed. Complainant satisfied.

No. 3468. Carl S. Evans (Deer Park) v. Great Northern Railway Company. Depot in bad condition. Closed. Company applied for authority to rebuild.

No. 3469. Frank Borzone (Seattle) v. City of Seattle. Water rates. Closed. No jurisdiction.

No. 3470. George D. Leach (Seattle) v. City of Seattle. Water rates. Closed. No jurisdiction.

No. 3471. Farrington & Barnum (Tacoma) v. Pacific Telephone & Telegraph Company. Installation. Closed. Phone installed.

No. 3472. Investigation death of John Helmbach, January 23, 1919, on Northern Pacific Railway. Closed. Investigated.

No. 3473. Investigation death of Sanford and Anna Essman, January 30, 1919, at Loveland crossing on Chicago, Milwaukee & St. Paul Railway. Closed. Investigated.

No. 3474. Eugene Howd (Tacoma) v. Havelock C. Boyle Company. Allocation of extension cost. Closed.

No. 3475. Mrs. H. V. Rominger (Underwood) v. Spokane, Portland & Seattle Railway. Agency station and discourteous trainmen. Closed. Investigated.

No. 3476. Edwin Wild (Tacoma) v. Chicago, Milwaukee & St. Paul Railway. Fare refund. Closed. Refund made.

No. 3477. Eugene Kuhne (Seattle) v. Puget Sound Electric Company. Failure to read meter when notified. Closed.

No. 3478. Roe Telephone Company (Winlock) v. Winlock Home Telephone Company. Increased rates. Closed. No jurisdiction.

No. 3479. Mrs. E. Larson (Everett) v. Puget Sound International Railway & Power Company. Meter test. Closed. Meter tested.

No. 3480. Ray W. Walker (Tacoma) v. Pacific Telephone & Telegraph Company. Service installation. Closed. Phone installed.

No. 3481. Investigation death of J. C. Anderson on January 6, 1919, at Seattle on Northern Pacific. Closed. Investigated.

No. 3482. L. R. Phillips (Molson) v. Great Northern Railway. Changes in car carrying hogs. Closed.

No. 3483. J. H. Harris (Vancouver) v. American Railway Express Company. Claim for two boxes of prunes. Closed. Adjusted.

No. 3484. Pittock & Leadbetter Lumber Company (Camas) v. North Coast Power Company. Rental rates for private fire standpipes. Closed.

No. 3485. Hebo Cereal Company (Tacoma) v. Puget Sound Electric Railway. Damage to coffee substitute. Closed. Claim settled.

No. 3486. E. K. Bull (North Bend) v. Cascade Telephone Company. Installation charge of \$5.00. Closed. Transferred to formal hearing No. 4705.

No. 3487. Citizens of Everson v. Sumas Electric Light Company. Closed.

No. 3488. City Council (Hamilton) v. Skagit River Telephone & Telegraph Company. Rates. Closed. Transferred to formal hearing No. 4830.

No. 3489. S. W. and Gilbert Badgley (Elma) v. Henry McCleary Timber Company. Telephone service. Closed. No jurisdiction.

No. 3490. A. A. Kelly (Spokane) v. Spokane & Inland Empire Railway. Discontinuance of stop at Kelly's Gardens. Closed. Adjusted.

No. 3491. H. W. Croft (Tacoma) v. Pacific Telephone & Telegraph Company. Service. Closed. Service installed.

No. 3492. Lee Squires (Vancouver) v. North Coast Power Company. Water charges. Closed. Tariff rate charged.

No. 3493. H. W. Paschke (Winlock) v. Winlock Home Telephone Company. Increased rates. Closed.

No. 3494. Fred North (Seattle) v. Pacific Telephone & Telegraph Company. Service. Closed. Complaint withdrawn.

No. 3495. F. W. Moore (Aberdeen) v. Grays Harbor Railway, Light & Power Company. Deposit. Closed.

No. 3496. Investigation death of J. M. Koch and Anna Koch, February 23, 1919, at Ritzville, on Northern Pacific Railway. Closed. Investigated.

No. 3497. Investigation death of A. J. Burkart, February 24, 1919, at Trude, on Chicago, Milwaukee & St. Paul Railway. Closed. Investigated.

No. 3498. H. G. Mauzey (Walla Walla) v. Pacific Power & Light Company. Increased residence lighting rates. Closed. Lack of prosecution.

No. 3499. Mrs. H. V. Rominger (Underwood) v. Underwood Telephone Company. Service. Closed.

No. 3500. Investigation death of Earl Bailey, March 3, 1919, at Argo, on Spokane, Portland & Seattle Railroad. Closed. Investigated.

No. 3501. Lee Baker (Allyn) v. Frank Raisoni. Service of boat "Victor." Closed.

No. 3502. A. H. Arendt (Yakima) v. Pacific Telephone & Telegraph Company. Long distance call erroneously charged. Closed. Adjusted.

No. 3503. Farmers Independent Telephone Company (Waterville) v. Pacific Telephone & Telegraph Company. Compensation to exchange. Closed. Adjusted.

No. 3504. Herbert Williams (White Salmon) v. Pacific Power & Light Company. Service installation. Closed. Adjusted.

No. 3505. Portland-Damascus Milk Company (Portland) v. American Railway Express Company. Copy of waybill. Closed. Complaint withdrawn.

No. 3506. Special street car file. Closed.

No. 3507. Investigation death of Roy Gress, February 17, 1919, at Ravensdale, on Northern Pacific Railway. Closed. Investigated.

No. 3508. Investigation death of Mrs. A. K. Kennedy, March 11, 1919, at Black River, on Northern Pacific Railway. Closed. Investigated.

No. 3509. W. H. Adams (Castle Rock) v. Home Telephone Company. Increased rates. Closed. No jurisdiction.

No. 3510. City Council (Camas) v. Camas-Washougal Telephone Company. Change in rates. Closed. No jurisdiction.

No. 3511. A. R. Spencer (Tacoma) v. Pacific Telephone & Telegraph Company. Service installation. Closed. Service installed.

No. 3512. Residents of Selfs and Dwyer Additions (Camas) v. Camas Water Company. Service extension. Closed. Service extended.

No. 3513. Chamber of Commerce (Colville) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Satisfactorily adjusted.

No. 3514. Model Laundry Company (Seattle) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Complainant satisfied.

No. 3515. Florence Hickey (Seattle) v. Puget Sound Traction, Light & Power Company. Latona bridge unsafe. Closed. Investigated.

No. 3516. W. W. Sheane Auto Company (Yakima) v. Pacific Power & Light Company. Power service. Closed. Data furnished.

No. 3517. Chas. F. Bailey (Granger) v. Oregon-Washington Railroad & Navigation Company. Abandoning alarm signal. Closed. Signal service continued.

No. 3518. Hartline Commercial Club v. Northern Pacific Railway. Freight station facilities. Closed.

No. 3519. Commercial Club (Pomeroy) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Covered by formal order.

No. 3520. O. G. Follevaag (Deer Park) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Covered by formal order.

No. 3521. F. Leo Grinstead (Colville) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Complaint satisfied.

No. 3522. E. H. Lester Logging Company (Vesta) v. Northern Pacific Railway Company. Service. Closed.

No. 3523. Frank G. Moran (Rolling Bay) v. Pacific Telephone & Telegraph Company. Pay phone installation. Closed. No jurisdiction.

No. 3524. L. M. Rice (Seattle) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Complaint satisfied.

No. 3525. Arthur Honeyman (Ilwaco) v. Ilwaco Telephone Company. Service installation. Closed. No jurisdiction.

No. 3526. Ben J. Bell & Co. (Yacolt) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. No jurisdiction.

No. 3527. Frank Downie (Seattle) v. Pacific Telephone & Telegraph Company. Service. Closed. Satisfactorily adjusted.

No. 3528. George Frederick (Kennewick) v. Pacific Power & Light Company. Charge for installing pumping plant. Closed. Adjusted.

No. 3529. Patrons at Winslow v. Pacific Telephone & Telegraph Company. Rates and discrimination. Closed. No jurisdiction.

No. 3530. Richard Hayter (Seattle) v. Pacific Telephone & Telegraph Company. Rates on Bainbridge Island. Closed. Adjusted.

No. 3531. Port Angeles Sand & Gravel Company (Port Angeles) v. Chicago, Milwaukee & St. Paul Railway. Rate on sand, carload. Closed.

No. 3532. Charles W. Johnson (Lyman) v. Skagit River Telephone & Telegraph Company. Toll charge, Lyman to Sedro Woolley. Closed. Transferred to formal hearing No. 4830.

No. 3533. Mark F. Mendenhall et al. (Spokane) v. Prescott Telephone Company. Connection. Closed. No jurisdiction.

No. 3534. E. Hackman (Everett) v. Puget Sound International Railway & Power Company. Refusal to give service. Closed. Adjusted.

No. 3535. Collision at Lake Ballinger, on Pacific Northwest Traction Company's line, March 24, 1919. Closed. Investigated.

No. 3536. Patrons of Chelatchie Valley Line (Yacolt) v. Pacific Telephone & Telegraph Company. Service and rates. Closed. No jurisdiction.

No. 3537. Investigation death of Frank Brown, March 27, 1919, at Selah, on Northern Pacific Railway. Closed. Investigated.

No. 3538. E. A. Hempson (Tacoma) v. Pacific Telephone & Telegraph Company. Service connection charge. Closed. Tariff rate charged.

No. 3539. G. J. Morgans (Kent) v. Puget Sound Electric Company. Increased fares. Closed.

No. 3540. Citizens of Edwall v. Great Northern Railway Company. Flag service train stop. Closed. Order issued to stop train No. 26.

No. 3541. Investigation death of unidentified man, April 8, 1919, at Maple Valley, on Chicago, Milwaukee & St. Paul Railway. Closed. Investigated.

No. 3542. Tokeland Oyster Company (Nahcotta) v. Ilwaco Telephone Company. Service. Closed. No jurisdiction.

No. 3543. Mrs. L. A. Swem (Blaine) v. Blaine Water Company. Service extension. Closed.

No. 3544. Harsted Lumber Company (Yelm) v. Northern Pacific Railway Company. Spur. Closed. Spur constructed.

No. 3545. B. L. Vickrey (Washtucna) v. Washtucna Water Works. Meter rates. Closed. No jurisdiction.

No. 3546. H. L. Hughes (Olympia) v. Pacific Telephone & Telegraph Company. Change in service. Closed. Satisfactorily adjusted.

No. 3547. Investigation death of Onni Pescka, April 12, 1919, at Napavine, on Oregon-Washington Railroad & Navigation Company's line. Closed. Investigated.

No. 3548. Commission v. Tacoma Railway & Power Company. Discontinuance of service from Summit to Puyallup. Closed. Transferred to formal hearing No. 4827.

No. 3549. W. H. Russell (Beach) v. Lummi Navigation Company. Increased rates and boat service. Closed. Formal order entered.

No. 3550. Investigation death of Jesse Epps, April 20, 1919, at Tacoma, on Pacific Traction line. Closed. Investigated.

No. 3551. John F. Loughran (Lacamas) v. Cowlitz, Chehalis & Cascade Railway. Operation condition of spur track. Closed. Adjusted.

No. 3552. J. M. Geraghty et al. (Spokane) v. Home Telephone & Telegraph Company. Pay phones in apartment houses. Closed. Tariff rates charged.

No. 3553. Mary E. Lamping (Seattle) v. Seattle Lighting Company. Disputed gas bill. Closed.

No. 3554. Investigation death of Leonard Thoreen, May 3, 1919, at Lowell, on Puget Sound International Railway & Power Company's line. Closed. Investigated.

No. 3555. Investigation death of Baby Crowley, May 3, 1919, at Oakesdale, on Oregon-Washington Railroad & Navigation Company's line. Closed. Investigated.

No. 3556. Commission v. Puget Sound Electric. Condition of track between Seattle and Tacoma. Closed. Repairs made.

No. 3557. Central Timber Export Company (Seattle) v. Seattle & Rainier Valley Railway Company. Demurrage. Closed. Charges in accordance with tariff.

No. 3558. Great Northern Railway Company v. City of Seattle. Dangerous grade crossing. Closed.

No. 3559. Commission v. Puget Sound & Willapa Harbor Railway Company. Dangerous snags along track. Closed. Snags removed.

No. 3560. Commission v. North Coast Power Company. Condition of track at Chehalis. Closed. Condition remedied.

No. 3561. Commission v. North Coast Power Company. Violation of electric code at Vancouver. Closed. Violation corrected.

No. 3562. Commission v. North Coast Power Company. Violation of safety provisions at Sifton. Closed. Safety provisions placed in operation.

No. 3563. Commission v. Cowlitz, Chehalis & Cascade Railway. Bad condition of equipment. Closed. Equipment repaired.

No. 3564. Blewett Hotel (Cashmere) v. Great Northern Railway Company. Annoyance from ringing of signal bell. Closed.

No. 3565. W. G. Norris (Seattle) v. Pacific Telephone & Telegraph Company. Increase in rates at Port Orchard. Closed. Tariff rates charged.

No. 3566. Stanley Hallett (Medical Lake) v. Great Northern Railway Company. Spur track. Closed.

No. 3567. Investigation death of Bessie Eyre, May 8, 1919, at Spokane, on Washington Water Power Company's line. Closed. Investigated.

No. 3568. Investigation death of Ted Rakness, May 8, 1919, at Tacoma, on Tacoma Railway & Power Company's line. Closed. Investigated.

No. 3569. Dr. C. E. Whitney (Buckley) v. Pacific Telephone & Telegraph Company. Increased rates. Closed. Rates according to tariff.

No. 3570. Daniel Murray (Deer Harbor) v. Puget Sound Navigation Company. Rules and rates for livestock shipments. Closed.

No. 3571. Investigation death of Robert Norton, May 12, 1919, at Seattle, on Municipal Railway's line. Closed. Investigated.

No. 3572. George A. Peter (Kennewick) v. Pacific Power & Light Company. Power rates. Closed. Tariff rates charged.

No. 3573. Frye & Co. (Seattle) v. Pacific Telephone & Telegraph Company. Increase in rates. Closed. Complaint satisfied.

No. 3574. Enos Green (Manette) v. North Pacific Public Service Company. Improper billing. Closed. Adjusted.

No. 3575. Julius Ewald (Bellingham) v. Fairhaven Water Company. Service extension. Closed. Adjusted.

No. 3576. Mrs. Mark A. Fullerton (Olympia) v. Pacific Telephone & Telegraph Company. Return of \$5.00 deposit. Closed. Adjusted.

No. 3577. Chehalis Mill Company (Chehalis) v. Oregon-Washington Railroad & Navigation Company. Delivery of cars to Cowlitz, Chehalis & Cascade Railway. Closed. Adjusted.

No. 3578. F. A. Tyler et al. (Molson) v. Molson Light & Water Company. Discontinuance of service, rates, etc. Closed.

No. 3579. Investigation death of Joe Clist, May 19, 1919, at Josco, on Oregon-Washington Railroad & Navigation Company's line. Closed. Investigated.

No. 3580. Brotherhood of Railway Trainmen (Ellensburg) v. Northern Pacific Railway Company. Handling long trains. Closed.

No. 3581. C. S. Gilbert (Valleyford) v. Valleyford Water Company. Rates. Closed. Adjusted.

No. 3582. Puyallup & Sumner Fruit Growers Association (Puyallup) v. Oregon-Washington Railroad & Navigation Company. Overcharge on shipment. Closed. Tariff filed.

No. 3583. Investigation death of A. C. Carlson, May 22, 1919, at Servia, on Chicago, Milwaukee & St. Paul Railway. Closed. Investigated.

No. 3584. Investigation death of Dorothy Allen Coleman, May 21, 1919, on Northern Pacific Railway Company's line. Closed. Investigated.

No. 3585. A. R. Rutherford (Morton) v. Tacoma Eastern Railroad. Passenger rates from Morton to Tacoma. Closed. New tariff filed.

No. 3586. C. M. Holtzinger (Yakima) v. Pacific Telephone & Telegraph Company. Refusal to furnish service. Closed. Service installed.

No. 3587. John Kildukis (Warden) v. Chicago, Milwaukee & St. Paul Railway Company. Delay in freight shipment. Closed. No jurisdiction.

No. 3588. H. W. Croft (Tacoma) v. Pacific Telephone & Telegraph Company. Long distance service. Closed. Adjusted.

No. 3589. E. J. Keller (Pateros) v. Pateros Irrigation District. Rates. Closed. No jurisdiction.

No. 3590. Investigation death of J. T. Toliver, May 26, 1919, at Montesano, on Northern Pacific Railway. Closed. Investigated.

No. 3591. Investigation death of Frank Seeley, March 17, 1919, at Ayer Junction, on Oregon-Washington Railroad & Navigation Company's line. Closed. Investigated.

No. 3592. Connell Cash Store (Connell) v. Connell Telephone Company. Order against speaking German. Closed. No jurisdiction.

No. 3593. Patrons (Wenatchee) v. Wenatchee Valley Gas & Electric Company. Shortage of power for irrigation. Closed. Transferred to formal hearing No. 4836.

No. 3594. Investigation death of unknown man, June 2, 1919, at Rosalia, on Chicago, Milwaukee & St. Paul. Closed. Investigated.

No. 3595. Pacific Car & Foundry Company (Seattle) v. Railroads. Cars held for demurrage. Closed. Cars released.

No. 3596. W. N. Caswell (Chelan) v. Great Northern Railway Company. Overcharge on shipments. Closed.

No. 3597. A. F. Douglas (Seattle) v. Pacific Coast Railroad Company. Fencing right-of-way. Closed. Fence built.

No. 3598. Hedlund Box & Shingle Company (Spokane) v. Home Telephone & Telegraph Company. Long distance charge. Closed. Tariff rate charged.

No. 3599. E. B. Peterson (Bremerton) v. Oregon-Washington Railroad & Navigation Company. Claim for lost goods. Closed. Claim paid.

No. 3600. Lummi Island Civic Improvement Club (Beach) v. Lummi Navigation Company. Increased fares. Closed. Transferred to formal hearing No. 4839.

No. 3601. Molson Commercial Club v. Ward Bros. Abandonment of light and water service. Closed. Respondent sold out.

No. 3602. Camas Commercial Club v. Camas-Washougal Telephone Company. Service. Closed. No jurisdiction.

No. 3603. Farmers Mutual Telephone Company (Lynden) v. Chicago, Milwaukee & St. Paul Railway Company. Use of right-of-way. Closed. Adjusted.

No. 3604. Mrs. A. L. Oldright (Chile) v. Pacific Coast Steamship Company. Claim for goods lost on "Congress." Closed. No jurisdiction.

No. 3605. Investigation death of H. Laughman, June 19, 1919, at Maytown, on Chicago, Milwaukee & St. Paul Railway. Closed. Investigated.

No. 3606. Henry F. Huntley (Seattle) v. Seattle Lighting Company. Service extension. Closed. Service promised.

No. 3607. W. R. Beynon (Northport) v. Northport Power & Light Company. Closed. Tariff rates charged.

No. 3608. C. O. Kittilsen (Yakima) v. Pacific Telephone & Telegraph Company. Service. Closed. Phone installed.

No. 3609. Town Council of Hamilton v. Great Northern Railway Company. Electric lighting in depot. Closed. Expenditure not justified.

No. 3610. City of Pasco v. Pacific Power & Light Company. Charge for resetting and reconnecting meters. Closed. Tariff rates charged.

No. 3611. J. A. Groves (Spokane) v. Pacific Telephone & Telegraph Company. Rates. Closed. Adjusted.

No. 3612. Southern Heights Improvement Association (Seattle) v. Puget Sound Traction, Light & Power Company. Lighting service extension. Closed.

No. 3613. S. H. Cutting (Waitsburg) v. Pacific Telephone & Telegraph Company. Charge for changing name in directory. Closed. Charge in accordance with postmaster general's order.

No. 3614. Citizens of Elk v. Great Northern Railway Company. Train service discontinued. Closed. Service continued.

No. 3615. Peerless Charcoal Company (Edgewood) v. Puget Sound Electric. Car service. Closed. Service promised.

No. 3616. Home Savings & Loan Company (Seattle) v. Puget Sound Traction, Light & Power Company. Cancelling contract. Closed. Rate cancelled by supplement filed February 17, 1919.

No. 3617. Joe J. Blefgen (Medical Lake) v. Washington Water Power Company. Cattle guards. Pending.

No. 3618. G. H. Huntington et al. (Castle Rock) v. Home Telephone Company. Exchange rate. Closed. No jurisdiction.

No. 3619. E. J. O'Larey (White Bluffs) v. Chicago, Milwaukee & St. Paul Railway Company. Protecting express at Beverly. Closed. Adequate protection provided.

No. 3620. Investigation death of Fred Christofferson, A. M. Anderson and Eddie Jones, July 4, 1919, at Seattle, on line of Pacific Northwest Traction Company. Closed. Investigated.

No. 3621. K. P. Olesen (Everett) v. Puget Sound International Railway & Power Company. Power rates. Closed. Tariff rates charged.

No. 3622. Pacific Coast Biscuit Company (Seattle) v. Shelton Transportation Company. Freight charges. Closed. Charge according to tariff.

No. 3623. Henry W. Peabody & Co. (Boston) v. Dodwell Dock & Warehouse Company. Terminal charges. Closed. No jurisdiction.

No. 3624. Jay Faris (Grandview) v. Pacific Power & Light Company. Return of deposit. Closed. Rules followed.

No. 3625. Investigation death of Mrs. S. E. Swich, July 9, 1919, at Seattle on line of Northern Pacific Railroad. Closed. Investigated.

No. 3626. Investigation death of D. M. Venable, July 9, 1919, at Montesano, on line of Northern Pacific Railway. Closed. Investigated.

No. 3627. Charles W. Johnson (Pasco) v. Pacific Telephone & Telegraph Company. Installation of service. Closed. Service installed.

No. 3628. W. Eddy et al. (Goldendale) v. Pacific Power & Light Company. Service. Closed.

No. 3629. Investigation death of Edward Carter, July 14, 1919, at Argo, on line of Oregon-Washington Railroad & Navigation Company. Closed. Transferred to formal hearing No. 4850.

No. 3630. M. A. Howe (Tacoma) v. Regents Park Land Company. Insufficient water supply. Pending.

No. 3631. Investigation death of Mr. Mack, May 4, 1919, near Beverly, on line of Pacific Power & Light Company. Closed. Investigated.

No. 3632. Commission v. Arlington Mining Company (Spokane). Violation of electric code at Okanogan. Closed. Violation corrected.

No. 3633. Moses Lake Fish Company, Inc. (Neppel) v. American Railway Express Company. Service. Closed. Service given.

No. 3634. Investigation death of Edward S. Barlow, August 5, 1919, at Tacoma, on Tacoma Railway & Power Company's line. Closed. Investigated.

No. 3635. Investigation death of Charles Davis, August 5, 1919, at Pasco, on Northern Pacific Railway. Closed. Investigated.

No. 3636. Investigation death of Jack Ura, August 7, 1919, at Auburn, on Northern Pacific Railway. Closed. Investigated.

No. 3637. Investigation death of Charles Martin, August 11, 1919, at Vancouver, on Spokane, Portland & Seattle Railway. Closed. Investigated.

No. 3638. Mrs. W. H. Harris et al. (Seattle) v. Mount View Water Company. Service. Closed. Conditions remedied.

No. 3639. Belmore Lumber Company (Olympia) v. Northern Pacific Railway Company. Industrial spur. Closed. Spur installed.

No. 3640. L. R. Phillips (Molson) v. Great Northern Railway Company. No water for stock in transportation at Great Northern yards at Molson. Closed. Service promised.

No. 3641. Mrs. Minnie Tobey (Seattle) v. Seattle Lighting Company. Meters robbed. Pending.

No. 3642. E. M. Moore (Portage) v. Pacific Telephone & Telegraph Company. Toll service on Vashon Island. Closed. Service improved.

No. 3643. Everett Commercial Club v. Northern Pacific Railway Company and Great Northern Railway Company. Carload coal rates. Closed. Tariff amended.

No. 3644. B. L. Muir (Seattle) v. Seattle Lighting Company. Larger service pipe in district south of Leschi Park. Closed. Service improved.

No. 3645. C. W. Keys (Yakima) v. Pacific Telephone & Telegraph Company. Service. Closed. Phone installed.

No. 3646. Mrs. F. L. Anderson (Yakima) v. Pacific Telephone & Telegraph Company. Service connection. Closed. Phone installed.

No. 3647. Connell and Pasco Commercial Clubs v. Northern Pacific Railway Company and Oregon-Washington Railroad & Navigation Company. Physical connection at Connell. Closed. Transferred to formal hearing.

No. 3648. John Sturgis et al. (Annapolis) v. Annapolis Water Company. Insufficient water supply. Closed. Service improved.

No. 3649. Medical Lake Grain & Milling Company (Medical Lake) v. Enloe Electric Company. Furnishing equipment. Closed. Ruling made.

No. 3650. C. W. Mooney (Molson) v. D. R. McNeil. Insufficient water supply. Closed. Transferred to formal hearing No. 4903.

No. 3651. J. A. Sage (Tacoma) v. Pacific Telephone & Telegraph Company. Inability to secure service. Closed. Service installed.

No. 3652. Mrs. Frank H. Gorrie (Seattle) v. Pacific Telephone & Telegraph Company. Failure to secure service. Closed. Order cancelled.

No. 3653. Investigation death of M. Hendrickson, August 13, 1919, at Roy, on line of Great Northern Railway. Closed. Investigated.

No. 3654. A. B. Hadley (Curlew) v. Great Northern Railway Company. Fencing right-of-way. Closed. Fence to be constructed.

No. 3655. Frank Downie (Seattle) v. Pacific Telephone & Telegraph Company. Bill for services during strike. Closed. Adjusted.

No. 3656. A. R. McLane (Yakima) v. Pacific Telephone & Telegraph Company. Installation. Closed. Service to be installed.

No. 3657. W. P. Osburn & Co. (Seattle) v. Pacific Telephone & Telegraph Company. Toll service. Closed. Complaint satisfied.

No. 3658. W. H. Bornfield (Beverly) v. Western Union Telegraph Company. Overcharge. Closed. Charge according to tariff of company.

No. 3659. George K. March (Spokane) v. Spokane & Inland Empire Railway. Rate for electrical current at Moran Station. Closed. Adjusted.

No. 3660. Investigation death of A. H. Kenyon and Mrs. Henry Carstone, August 2, 1919, at Springdale, on Great Northern Railway. Closed. Investigated.

No. 3661. Grand Central Hotel (Aberdeen) v. Grays Harbor Railway, Light & Power Company. Refusal to furnish service. Closed. Adjusted.

No. 3662. Citizens of Winlock v. Winlock Water Company. Shutting off water at 11 p. m. Closed.

No. 3663. N. Stratton (Ralston) v. D. K. Roloff. Discontinuing water service. Pending.

No. 3664. King County Dairy Association (Seattle) v. Chicago, Milwaukee & St. Paul Railway Company and Great Northern Railway Company. Side track facilities at Tolt. Closed. Facilities improved.

No. 3665. W. J. Aumiller (Yakima) v. Pacific Power & Light Company. Deposit for electrical service. Pending.

No. 3666. Investigation death of Roy Westlund, August 23, 1919, at Spokane, on line of Washington Water Power Company. Closed. Investigated.

No. 3667. Petition of Chicago, Milwaukee & St. Paul Railway Company for permit re electrical construction at Renton. Closed.

No. 3668. W. H. Gilmore (Stevenson) v. Stevenson Water Company. Rates. Closed. Adjusted.

No. 3669. Mrs. Ada Gowan (Ellisport) v. Washington Coast Utilities. Excessive charge. Closed. Adjusted.

No. 3670. White Bluffs Grange v. American Railway Express Company. Facilities for handling soft fruits. Closed. Facilities improved.

No. 3671. City of Yakima v. Pacific Telephone & Telegraph Company. Service. Closed. Service improved.

No. 3672. W. W. Washburn & Son (Neah Bay) v. Henry James. Excessive freight charges. Closed. No jurisdiction.

No. 3673. Fred N. Forslund (Kennewick) v. Pacific Power & Light Company. Extension. Closed. Service furnished.

No. 3674. Tom Cody (Walla Walla) v. Pacific Power & Light Company. Safety rules. Closed.

No. 3675. H. L. Sommerville (Yakima) v. Pacific Telephone & Telegraph Company. Toll calls. Closed. Complainant satisfied.

No. 3676. Columbia Shingle Company (Kalama) v. Northern Pacific Railway Company. Industrial spur. Closed. Spur constructed.

No. 3677. Investigation death of George Prinner, September 3, 1919, at Rosea, on Northern Pacific Railway Company's line. Closed. Investigated.

No. 3678. Investigation death of R. Culver, September 1, 1919, at Spokane. Closed. Investigated.

No. 3679. Investigation death of Frank Sharp, September 7, 1919, east of Puyallup reservation, on Northern Pacific Railway Company's line. Closed. Investigated.

No. 3680. O. F. Aamodt (Yakima) v. Pacific Telephone & Telegraph Company. Failure to secure service. Closed. Service promised.

No. 3681. Thomas Burns (Bellingham) v. Pacific Telephone & Telegraph Company. Toll calls erroneously charged. Pending.

No. 3682. Patrons (Rosalia) v. Enloe Electric Company. Service. Pending.

No. 3683. City of Seattle v. Seattle Lighting Company. Gas shortage. Closed. Transferred to formal hearing No. 4901.

No. 3684. Wilmot G. Whitfield (Roslyn) v. Western Union Telegraph Company. Refusal to install clock in high school. Closed.

No. 3685. Harry E. Johnson (Yakima) v. Pacific Telephone & Telegraph Company. Installation. Closed. Service installed.

No. 3686. Commission v. Pacific Telephone & Telegraph Company. Service at Seattle. Closed. Transferred to formal hearing No. 4902.

No. 3687. F. A. Hardwick (Tenino) v. Tenino Telephone Exchange. Charges and service. Pending.

No. 3688. J. G. McKim (Seattle) v. Puget Sound Traction, Light & Power Company. Lighting service extension. Closed. Service furnished.

No. 3689. City of Mount Vernon v. Great Northern Railway Company. Crossing protection. Closed. Crossing protected.

No. 3690. H. H. Hoff (Seattle) v. Puget Sound Traction, Light & Power Company. Electric heating rates. Closed. Tariff rates charged.

No. 3691. Kerr Gifford & Co. (Portland) v. State Grain Department. Inspection. Closed. Investigated.

No. 3692. Dr. O. U. Johnson (Edwall) v. Pacific Telephone & Telegraph Company. Service. Closed.

No. 3693. Investigation death of J. D. Wallace and M. L. Kiser, September 24, 1919, at Bolles, on Oregon-Washington Railroad & Navigation Company's line. Closed. Investigated.

No. 3694. Investigation death of August Kasun, September 21, 1919, at Zillah, on Northern Pacific Railway Company's line. Closed. Investigated.

No. 3695. Investigation death of Mrs. Mary Scott, September 29, 1919, at Stevenson, on Spokane, Portland & Seattle Railway Company's line. Pending.

No. 3696. Investigation death of Hans Korsboen, August 31, 1919, three miles east of Palouse on Washington Water Power Company's line. Closed. Investigated.

No. 3697. F. W. Peabody (Edmonds) v. Washington Coast Utilities. Refusal to connect for electric light service. Pending.

No. 3698. Wilmot G. Whitfield (Roslyn) v. Western Union Telegraph Company. Charges for telegram. Closed. Charges according to tariff.

No. 3699. B. O. Skewis (Dupont) v. Pacific Telephone & Telegraph Company. Disconnection. Closed. Adjusted.

No. 3700. Loyal Order of Moose, Seattle Lodge No. 211, v. Puget Sound Traction, Light & Power Company. Refusal to furnish direct current for ventilating system. Closed. Two utilities not to serve same customer.

No. 3701. G. H. Huntington et al. (Castle Rock) v. Washington-Idaho Water, Light & Power Company. \$200 contract. Closed. No jurisdiction.

No. 3702. Calvin Phillips (Seattle) v. Pacific Telephone & Telegraph Company. Type used in directories. Closed. Type to be improved.

No. 3703. P. B. Parker (Seattle) v. Seattle Lighting Company. Extension. Closed. Satisfactory arrangements for service made.

No. 3704. Investigation death of Harold Balcom, October 13, 1919, at Hillsdale, on Chicago, Milwaukee & St. Paul Railway Company's line. Closed. Investigated.

No. 3705. Investigation death of Tony Glass on October 10, 1919, at Kanasket, on Northern Pacific Railway Company's line. Closed. Investigated.

No. 3706. A. V. Hooper (Yakima) v. Pacific Telephone & Telegraph Company. Installation of service. Closed. Service installed.

No. 3707. Washington Dehydrated Food Company (Yakima) v. Pacific Telephone & Telegraph Company. Poor service. Closed. Service improved.

No. 3708. Salmon Bank Canning Company (Richardson) v. Inter-Island Telephone Company. Forwarding telegrams. Closed. Transferred to formal hearing No. 4923.

No. 3709. W. L. Hayward (Seattle) v. Pacific Telephone & Telegraph Company. Service and account. Closed. Adjusted.

No. 3710. Z. I. and Mrs. Kate Burton (Spokane) v. Washington Water Power Company. Refusal to furnish service. Closed. Service furnished.

No. 3711. Commission v. Modern Electric Company (Opportunity). Violation of electric code. Closed. Violation corrected.

No. 3712. Commission v. Washington Water Power Company. Violation of electric code at Spokane. Closed. Violation corrected.

No. 3713. Investigation death of W. F. Smith, October 14, 1919, at Tudor, on Spokane & Inland Empire Railway's line. Closed. Investigated.

No. 3714. Mrs. Carl Woodard (Olympia) v. Pacific Telephone & Telegraph Company. Installation. Closed. Service installed.

No. 3715. H. S. Brown (Seattle) v. Pacific Telephone & Telegraph Company. Service and account. Closed. Satisfactorily adjusted.

No. 3716. Investigation death of Dr. William Thatcher, October 1, 1919, at Spokane, on Great Northern Railway Company's line. Closed. Investigated.

No. 3717. Avery Ellis (Hoquiam) v. Grays Harbor Railway & Light Company. Operation of one-man cars. Pending.

No. 3718. George E. Blurock (Sumner) v. Puget Sound Traction, Light & Power Company. Service extension. Pending.

No. 3719. Mrs. Fred H. Gross (Tacoma) v. Pacific Telephone & Telegraph Company. Phone installation. Closed. Service installed.

No. 3720. E. G. Morse (Manette) v. North Pacific Public Service Company. Failure to furnish service. Closed. Service furnished.

No. 3721. Postal Telegraph-Cable Company (Olympia) v. Pacific Telephone & Telegraph Company. Name omitted from directory. Closed. Complaint satisfied.

No. 3722. Krupp Telephone Company (Krupp) v. Pacific Telephone & Telegraph Company. Long distance connections. Pending.

No. 3723. City Council (Bremerton) v. North Pacific Public Service Company. Lack of service. Pending.

No. 3724. Bellingham Electric Company (Bellingham) v. Pacific Telephone & Telegraph Company. Refusal to connect with foreign equipment. Closed. Utility's rule reasonable.

No. 3725. Commission v. Little Spokane Light & Power Company. Violation of electric code. Pending.

No. 3726. Mrs. E. S. Horton (Olympia) v. Pacific Telephone & Telegraph Company. Service. Closed. Service improved.

No. 3727. Robert Thomas (Winlock) v. Winlock Water Company. Discontinuance of service. Pending.

No. 3728. Investigation death of Vera Wilbur, September 3, 1919, at Marcus, on Marcus ferry. Closed. Investigated.

No. 3729. Johnson & Higgins (Seattle) v. Pacific Telephone & Telegraph Company. Adjustment of account. Closed. Satisfactorily adjusted.

No. 3730. E. R. Hessel (Connell) v. Connell Telephone Company. "Five cents extra" charge. Closed. New tariff filed.

No. 3731. Investigation death of Roy K. Tredwell, October 15, 1919, Dumas Spur, on Northern Pacific Railway Company's line. Closed. Investigated.

No. 3732. J. T. Tallackson (East Stanwood) v. Washington Coast Utilities Company. Refusal to furnish service. Closed. Service furnished.

No. 3733. Mrs. Claude E. Hicks (Tacoma) v. Pacific Telephone & Telegraph Company. Installation of service. Closed. Phone installed.

No. 3734. Commission v. Great Northern Railway Company. No lights in train, Wenatchee to Oroville. Closed. Lights promised.

No. 3735. J. C. Talbott (Charleston) v. North Pacific Public Service Company. Service extension. Closed. Explanation made.

No. 3736. W. E. Daniell (Camano) v. Camano Dock Company. Dangerous dock and rates. Pending.

No. 3737. James Woolley (Port Angeles) v. North Pacific Public Service Company. Rates. Pending.

No. 3738. Mrs. Minnie L. Radcliffe (Seattle) v. Seattle Lighting Company and Pacific Telephone and Telegraph Company. Closed. Service promised by both companies.

No. 3739. Investigation death of J. S. Morefield, November 10, 1919, at Tacoma, on line of Tacoma Railway & Power Company. Closed.

No. 3740. Investigation death of Mrs. Annie Sloan, November 9, 1919, at Everett, on Puget Sound International Railway & Power Company's line. Closed. Investigated.

No. 3741. J. K. Buchanan (Garfield) v. Washington Water Power Company. Rates. Closed. Proper rate charged.

No. 3742. LaCrosse Electric Light & Power Company (LaCrosse) v. LaCrosse Roller Mills. Temporary restraining order. Closed. No jurisdiction.

No. 3743. Mrs. Alice V. Robinson (Seattle) v. Seattle Lighting Company. New application for service. Pending.

No. 3744. R. L. Picken (Tonasket) v. Pacific Telephone & Telegraph Company. Toll charge. Closed. Charge according to tariff.

No. 3745. W. R. Chesley (Seattle) v. Pacific Telephone & Telegraph Company. Delayed moving of telephone. Closed. Service installed.

No. 3746. Theo. Guenther et al. (Chattaroy) v. Great Northern Railway Company. Station agent. Pending.

No. 3747. Day Island Club (Day Island) v. Pacific Telephone & Telegraph Company. Rates. Pending.

No. 3748. Investigation death of Mrs. Matilda Nichols, November 14, 1919, at Bellingham, on Puget Sound Traction, Light & Power Company's line. Pending.

No. 3749. C. W. Gilbreath (Dayton) v. Pacific Power & Light Company. Service extension. Pending.

No. 3750. C. W. Kohagen (Yakima) v. Pacific Telephone & Telegraph Company and Pacific Power & Light Company. Installation charge, service and drainage. Pending.

No. 3751. Investigation death of William Goodnough, November 18, 1919, at Hatton, on Northern Pacific Railway. Pending.

No. 3752. In the Matter of the Walla Walla Valley Railway Company. Discontinuance of service. Pending.

No. 3753. Mrs. R. B. Simpson (Spokane) v. Pacific Telephone & Telegraph Company. Service. Pending.

No. 3754. Central Planing Mill (Vancouver) v. Pacific Telephone & Telegraph Company. Toll service. Pending.

No. 3755. Mount Vernon Commercial Club v. Railroad Administration. Car shortage. Closed. Conditions investigated.

No. 3756. Northwest Seed Company (Seattle) v. Steamer "Star." Overcharge. Closed. Tariff rate charged.

No. 3757. E. V. Grisvard (Seattle) v. Pacific Telephone & Telegraph Company. Service. Pending.

No. 3758. Investigation death of Mrs. May Jensen, November 18, 1919, at Silver Lake, on Pacific Northwest Traction Company's line. Closed. Investigated.

No. 3759. O. E. Schafer (Medical Lake) v. Washington Water Power Company. Refusal to load milk at Medical Lake depot. Pending.

No. 3760. G. H. Taylor (Goldendale) v. Pacific Power & Light Company. Service connection. Pending.

No. 3761. F. W. Winter (Seattle) v. Sunnysdale Telephone Company. Service and increased rates. Pending.

REPORT OF CHIEF ENGINEER.

Olympia, Wash., December 2, 1919.

The Public Service Commission of Washington, Olympia, Washington.

Gentlemen: Complying with your instructions, I herewith submit the following report on the work done by your Engineering Department in the fiscal year December 1, 1918, to November 30, 1919.

INVESTIGATION OF FORMAL CASES.

Kelso Water Company (Case No. 4825).

(Kelso, Wash.)

The above named company having made application for an increase in water rates in the city of Kelso and the city authorities having brought complaint against the corporation in matters of both rates and service, a complete "Cost of Reproduction" of this system was made, an investigation into the service facilities was subsequently made, and a complete valuation, rate and service hearing was held on June 19, 1919.

McNeil Light & Water Company (Case No. 4903).

(Molson, Wash.)

This company operates an electric plant and water system in the unincorporated town of Molson. The company is poorly equipped for rendering service and it is not surprising that there was a sufficient number of complaints to warrant an investigation. A complete investigation, including valuation, service and rates, was made and report submitted. A hearing was held at Molson on October 28th. The case is at present in the hands of the Commission for decision.

North Coast Power Company (Case No. 4805).

(Vancouver Street Car Fares.)

The above corporation made application for an increase in street car rates from five cents to seven cents within the city limits of Vancouver, Washington. The "Cost of Reproduction" made by the company engineer was checked by your engineers. A hearing was held on April 21, 1919.

North Coast Power Company (Case No. 4924).

This company operates a series of electric light and power, street railway and water utilities from Vancouver, Washington, to Tenino. A complete cost of reproduction of the electric properties of the company in this state has been made, and report submitted. A hearing to fix the valuation of this property has been set for an early date in the ensuing fiscal year.

Orchard Water Company (Case No. 4801).

The Orchard Water Company having applied for an increase in water rates at Kalama, Washington, your engineering department made a complete cost of reproduction and necessary analysis of operating data. A hearing was held on June 21, 1919.

Pacific Telephone & Telegraph Company (Case No. 4747).

The Pacific Telephone & Telegraph Company, then under control of the postmaster general, in December, 1918, applied for increased rates. After a thorough engineering and accounting investigation, a hearing was held in Olympia on January 15, 16 and 17, 1919.

Pacific Telephone & Telegraph Company (Case No. 4902).

(Seattle, Wash.)

Complaints having been received relative to the quality of the telephone service in Seattle, your engineer employed Mr. Sill, a consulting telephone engineer, to make a special investigation of these complaints. A hearing in this case was held in Seattle on October 6th and 7th. The Commission then issued an order requiring the company to improve its service and to furnish the Commission with progress reports from time to time.

Puget Sound Traction, Light and Power Company (Case No. 4745).

The residents of McKinley Hill and Boulevard Park districts having applied to the above named company for electric light service and having been refused the same, your engineering department made an investigation of the situation, examining into the question of cost of constructing lines to serve this community and also as to the prospective revenue to be derived from the locality. After a formal hearing the company extended service to these localities through the efforts of the Commission.

Puget Sound International Railway & Power Company (Case No. 4820).

(Everett, Wash.)

After a hearing held on January 9, 1919, which was subsequent to a report made by your engineering department in 1918, it was decided that the issue in this case not being absolutely clear, the Commission would file a new complaint upon their own motion. This was subsequently done and your engineer made a new report bringing the investigation up to a later date than the former report. A hearing was held on May 26, 1919, and this case at the present time is awaiting the decision of the Commission.

Pacific Power & Light Company (Case No. 4790).

(Walla Walla and Yakima Gas Utilities.)

An application was made for increases in rates in these localities. After the usual engineering investigation of utilities of this character, hearings were held in these respective towns in March, 1919, and the Commission entered an order refusing the increase.

Pacific Power and Light Company (Case No. 1688).

The Commission in 1915 fixed the value of the Pacific Power and Light Company properties in the State of Washington, this value being fixed as of June 30, 1913. Your engineer brought up to date, from the company records, the actual additions to property from June 30, 1913, to December 31, 1918, and assembled the same in a report. This report was submitted as evidence at a hearing on July 11, 1919, at Kennewick, Washington, as a result of which the Commission issued an order fixing the value of the light and power properties of the Pacific Power and Light Company in Washington as of December 31, 1918.

Pacific Traction Company (Case No. 4841).

In this case the company, which operates a suburban electric railway line to Steilacoom and Murray, filed a tariff raising the zone fares outside of the city of Tacoma from five cents to seven cents. Your engineering department made an investigation of the situation, submitting a report thereon. A hearing was held at Steilacoom September 28, 1919.

Seattle Lighting Company (Case No. 4741).

The report on the operating statistics of this company, which was being compiled at the time of our last annual report, disclosed the fact that the rate of return being earned was substantially that which was anticipated under the rates put into effect in 1918. In view of this showing the company withdrew its petition for the discontinuance of the practice of allowing a discount for the prompt payment of monthly bills.

Seattle Lighting Company (Case No. 4901).

On account of a strike, early in September, of employees of the gas company in Seattle, your engineer, under your instructions, investigated the condition of gas supply at various times, the pressure in the mains, and other matters pertaining to service, embodied the same in the form of a report, and submitted the same at a hearing held in Seattle on October 4 and 5, 1919.

Tumwater Light & Water Company (Case No. 4770).

(Leavenworth, Wash.)

This company made application for an increase in rates and after a cost of reproduction and a thorough analysis of the operating statistics had been made, a report was submitted to the Commission which showed so clearly that the company was entitled to some relief, that the matter was adjusted by the Commission and the city authorities, and the new rates went into effect without the necessity of a formal hearing.

Tacoma Railway & Power Company (Case No. 4827).

The Tacoma Railway & Power Company applied to the Commission for permission to abandon a portion of what is known as the "Old Puyallup" line. A thorough investigation was made and a hearing held at Puyallup.

Vashon Light & Power Company (Case No. 4758).

This corporation is owned by the West Coast Utilities Company, operating various small public utilities in the Puget Sound district. An investigation of the accounting records of this property was made by your engineers, a hearing was held and increases in rates of the light and power system made effective, conditioned on certain improvements in the way of regulation of voltage to be made by the company. Fluctuations in the voltage were caused principally by a shipyard and a sawmill which at a later date ceased operation, the necessity for installing regulating apparatus thereby ceasing. The company was not required to incur this additional expense.

Washington Water Power Company (Case No. 806).

An apportionment of the value of the above property previously fixed by the Commission having been made to the various towns and communities in Eastern Washington, a series of hearings were held at the following places: Ritzville, Sprague, Davenport, Tekoa, Colfax and Pullman. The various rates applied for by the Washington Water Power Company in their endeavor to balance their schedules and eliminate a number of superfluous rates were gone into and discussed, and with certain modifications this schedule was put into effect by a formal order of the Commission.

Washington Water Power Company (Case No. 1809).

(Flour Mill Rates.)

It appearing to the Commission that certain flour mill operators in Eastern Washington in the districts served by the above company had not had an opportunity to be sufficiently heard at the rate hearings held in Case No. 809, before mentioned, a special investigation was made and a hearing held in Spokane on April 1, 1919. As a result of this hearing the electrical rates pertaining to flour mills were ordered put into effect. The new rates were somewhat lower than those previously allowed by the Commission in its order in Case No. 809.

Washington Water Power Company (Case No. 4796).

(Spokane Street Car Fares.)

An investigation was made into the street car system in Spokane and after a hearing a six-cent car fare was put into effect temporarily.

Wenatchee Valley Gas & Electric Company (Case No. 4836).

The above corporation having applied for an increase in rates, your engineering department made a complete investigation of this property and compiled a cost of reproduction and such other data as pertained to the matter under consideration. After a hearing held in Wenatchee on September 5th and 6th, the Commission fixed the value of the light and power property and refused to allow the increase in rates.

Yakima Valley Transportation Company (Case No. 4799).
(Street Car Fares.)

An investigation into the affairs of the above company was made by the Commission's accountant and a hearing was held by the Commission in Yakima on March 27, 1919.

INVESTIGATION OF INFORMAL CASES.

Enloe Electric Company (Eng. Jacket No. 294).
(Rosalia, Malden, Fairfield, Waverly.)

Complaints having been received from customers of the above company residing in the towns named, relative to poor voltage regulation, this department undertook an investigation of the reasons for the complaint. The results of this investigation are set forth in a report. Your engineer cooperated with the company in an effort to find a remedy. It is not known at this time if our recommendations have been followed. No formal hearing has been held in this matter and it is expected that a satisfactory solution will soon be found.

Pacific Power & Light Company (Eng. Jacket No. 267).

The residents of Selah district in Washington and also those in the Underwood district in Washington having made application to the Pacific Power & Light Company for electric lighting service, your engineering department made an investigation to ascertain the advisability of these services being given. The investigation disclosed that the revenue to be derived from the residents of these communities would not be such as would warrant the corporation in making these extensions. These reports were submitted to the residents of these localities and they were requested to confer with the corporation and make such arrangements as would be mutually acceptable to all parties concerned.

South Prairie Water Company (Eng. Jacket No. 280).

The company asked for an increase in rates, which was protested by the consumers concerned. The engineering department made an investigation of the system and submitted a cost of reproduction report. At a conference arranged between all parties concerned the disputed matters were adjusted and the case did not come up for formal hearing.

In addition to the above cases, this department has conducted meter tests, miscellaneous inspections and informal investigations of small complaints referred to it for action. We are at the present time giving some thought to the matter of preparing a new issue of the "Rules of the Public Service Commission" and also to the matter of making a critical study of the reports submitted to us by the Interstate Commerce Commission on the valuation of the railroads in this state.

With the close of the war and the release of former employees of this department who entered the service, Captain Herbert J. Flagg, coast artillery, United States army, returned to his former position of assistant engineer; Z. E. Merrill, sergeant, corps of engineers, United States army, and C. E. Delbridge, master signal electrician, signal corps, United States army,

were employed as assistant engineer and engineering stenographer, respectively. On October 15th, Mr. D. F. McCurrach, chief engineer for the Commission, resigned to engage in private practice, and Mr. Herbert J. Flagg was appointed to fill the vacancy. Mr. C. A. Cadden, assistant engineer, resigned on November 8th, and the vacancy thus created was filled by the appointment of Lieutenant Miles E. Clark, corps of engineers, United States army. It will be noted from the foregoing that the entire personnel of the engineering department is now composed of former service men. This is a matter of profound gratification to the department.

This opportunity is taken to give credit to those assistants named herein, and their predecessors, who by their loyalty and diligence have contributed to the success of the work of your engineering department. Thanks are also due to Mr. McCurrach, who wrote the part of this report pertaining to the work done under his direction as chief engineer.

Respectfully submitted,

HERBERT J. FLAGG,
Chief Engineer.

REPORT OF TRACK SCALE EXPERT.

December 1, 1919.

The Public Service Commission of Washington, Olympia, Washington:

I am pleased to place before you my annual report of railroad track scale testing in the State of Washington, and including nine scales tested in the state of Idaho by request of carriers in this state. These tests are from December 1, 1918, to November 30, 1919.

I am also attaching a complete list of railroad track scales tested, showing their location, number, beam equipment and capacity in tons, kind of foundation and date of each test; also errors as shown per section by general average, light or heavy. Errors of 40 lbs. or less not shown.

In testing scales as shown in attached list, I used our joint Washington and Oregon scale testing car No. 1, weight 60,000 pounds, with a wheelbase of six feet, while testing.

COMPLETE LIST OF ALL RAILROAD TRACK SCALES TESTED

From December 1, 1918, to November 30, 1919.

Total number of track scales tested.....	106
Total number of tests made.....	123
Track scales tested belonging to carriers, State of Wash- ington	64
Track scales tested belonging to industries.....	33
Track scales tested in State of Idaho.....	9
Track scales tested and our seal removed, carriers.....	7
Track scales tested and our seal removed, industries.....	6
Track scales tested and our seal placed thereon, carriers....	57
Track scales tested and our seal placed thereon, industries..	27
Track scales tested without our seal, carriers.....	6
Track scales tested without our seal, industries.....	4
Number of scales refitted and tested since last report, car- riers	8
Number of scales refitted and tested since last report, in- dustries	2
Number of new scales installed and tested since last report, carriers	2
Number of new scales installed and tested since last report, industries	7
Number of days employed making test.....	212
Salary and expense incident to making tests.....	\$2,418.54
Average cost per test, about.....	\$20.00

Our test car has traveled about 9,000 miles in making above test.

Scales Tested and Our Seal Removed.

When a scale will not weigh accurately and cannot be corrected by adjusting, our seal is removed and scale recommended for repairs.

CARRIERS.

Pacific Coast Railroad Company—Renton, Wash., No. 191,205, Feb. 20, 1919.
Pacific Coast Railroad Company—Black Diamond, Wash., No. (none), Oct. 2, 1919.
Northern Pacific Railway Company—Snohomish, Wash., No. E83,048, July 15, 1919.
Northern Pacific Railway Company—Sumas, Wash., No. 140,241, July 21, 1919.
Northern Pacific Railway Company—Bellingham, Wash., No. 170,809, July 24, 1919.
Northern Pacific Railway Company—Everett, Wash., No. (none), July 27, 1919.
Great Northern Railway Company—Tacoma, Wash., No. 175,139, June 4, 1919.

Great Northern Railway Company—South Bellingham, Wash., No. 143, 179, July 25, 1919.

Great Northern Railway Company—Seattle (Interbay), Wash., No. 107,886, July 28, 1919.

SEAL REMOVED—INDUSTRIAL SCALES.

Ritzville Flour Mills—Ritzville, Wash., No. E46,952, April 30, 1919.

Renton Coal Company—Renton, Wash., No. 196,726, July 18, 1919.

Olympic Portland Cement Company—Bellingham, Wash., No. E50,899, July 25, 1919.

Seattle Flour Mills—Seattle, Wash., No. (none), July 30, 1919.

Rainier Products Company—Seattle, Wash., No. 191,217, Sept. 27, 1919.

Pacific Coast Coal Company—Issaquah, Wash., No. E55,184, October 7, 1919.

Several of the above scales have been refitted and repaired but too late to be tested for this report.

Scales Refitted and Tested Since Last Report.

CARRIERS.

Northern Pacific Railway.

Auburn (No. 2), Wash.—Scale No. E35,050, February, 1919.

Seattle (Interbay), Wash.—Scale No. 171,851, March, 1919.

Hoquiam, Wash.—Scale No. E18,043, June, 1919.

Auburn (No. 1), Wash.—Scale No. E3,504, July, 1919.

Seattle (Middle Yards), Wash.—Scale No. 190,398, August, 1919.

Ellensburg, Wash.—Scale No. E43,497, August, 1919.

Yardley, Wash.—Scale No. E35,039, August, 1919.

Spokane, Portland & Seattle Railway Co.

Fallbridge, Wash.—Scale No. 175,272, December, 1919.

Oregon-Washington Railroad & Navigation Co.

Seattle (Argo), Wash.—Scale No. 204,094, January, 1919.

Scales Refitted Since Last Report.

INDUSTRIAL.

American Smelters Securities Co.—Ruston, Wash., Scale No. E79,451, January, 1919.

Renton Coal Company—Renton, Wash., Scale No. E50,899, August, 1919.

Condemned Scales Replaced by New Ones.

CARRIERS.

Spokane, Portland & Seattle Railway Company.

Vancouver, Wash.—Scale No. 190,293. Replaced by new scale No. 7,813, Dec., 1918.

Pacific Coast Railroad Company.

Renton, Wash.—Scale No. 191,205. Replaced by new scale No. E486,467, June, 1919.

INDUSTRIAL.

Seattle Flour Mill.

Seattle, Wash.—Scale No. (none). Replaced by new scale No. E600,427, Aug., 1919.

New Scales Installed and Tested Since Last Report.

CARRIERS.

Spokane, Portland & Seattle Railway, Company, Vancouver, Washington—Strait Scale Company, No. 7,813, 50-foot platform, 150-ton capacity, concrete foundation, steel construction, rigid deck, 4-section, installed December, 1918, tested December 27, 1918.

Pacific Coast Railroad Company, Renton, Washington—Fairbanks scale No. E486,467, 50-foot platform, 150-ton capacity, concrete foundation, steel construction, rigid deck, 4-section, installed June, 1919, tested June, 1919.

INDUSTRIAL.

The G. M. Standifer Construction Company, Vancouver, Washington—Fairbanks scale No. E275,350, 50-foot platform, 100-ton capacity, light pattern, 5-section, concrete foundation, wood construction, installed September, 1918, tested January 25, 1919.

American Smelters Securities Company, Ruston, Washington—Fairbanks scale No. E333,350, 50-foot platform, 100-ton capacity, concrete foundation, steel construction, rigid deck, 4-section, installed January, 1919, tested Jan. 30, 1919.

Philippine Vegetable Oil Company, Tacoma, Washington—Fairbanks scale No. E608,638, 50-foot platform, 100-ton capacity, concrete foundation, steel construction, 4-section, installed June, 1919, tested June 23, 1919.

Raven Coal Company, Ravendale, Washington—Howe Scale Co., No. 1,041,773, 50-foot platform, 100-ton capacity, concrete foundation, wood construction, 4-section, installed April, 1919, tested June 9, 1919.

Seattle Flour Mills, Seattle, Washington—Fairbanks scale No. E600,427, 100-ton capacity, concrete foundation, steel construction, 4-section, installed August, 1919, tested September 19, 1919.

Utah Idaho Sugar Company, Toppenish, Washington—Fairbanks scale No. E520,-303, 50-foot platform, 100-ton capacity, light pattern, concrete foundation, steel construction, 5-section, installed September, 1919, tested Sept. 27, 1919.

Sunnyside, Washington—Fairbanks scale No. (none), 50-foot platform, 100-ton capacity, light pattern, concrete foundation, steel construction, 5-section, installed October, 1919, tested November 7, 1919.

By request of the State Grain Department, February 4, 1919, tested the new 120,000 lbs. capacity hopper scale of the Sperry Flour Mill Company, Spokane. This scale was found to be poorly installed, connections not hanging plumb. The type register beam was not sealed correctly. Repairs as recommended have been made and scale now is weighing satisfactorily.

There are a few scales in outlying sections that are not used very much that have not been tested this year. This was due to the fact that freight train service was reduced to such an extent on some lines that some weeks I could only test one or two scales. Other delays were caused by carriers not making repairs on condemned scales promptly on account of a shortage of labor and material, making it necessary to double back and forth.

The condition of railroad track scales throughout the state is fairly good. No complaints have been filed on account of scales not weighing correctly the past year.

Calibrating Scale Testing Car.

As we do not have a master scale for weighing our test car in this state, I have been checking it with the Southern Pacific Company's test car, weight 40,000 lbs., weighed on their master scale at Oakland, California.

Our test car was checked at Roseburg, Oregon, March 10, 1919, and August 21, 1919.

Mr. J. T. Enwright, in charge of the Federal track scale testing car No. 2, of the Bureau of Standards, Washington, D. C., was in Seattle, Washington, November 1, 1919. He tested our car with 60,000 lbs. of standard weights and found it to weigh exactly 60,000 lbs. as stenciled.

Repairs to Test Car.

Seattle, Washington, October 9, 1919, Northern Pacific Railway Company made the following repairs: One drawbar and some new parts for air cylinder and other light repairs; and at Auburn, November 4, 1919, one

push rod for air cylinder, two brake shoes, and repairs to air line. Estimated cost of the above repairs about \$60.00.

The test car at present time is in fairly good repair except some of the wheels have been flattened a little by sliding and may have to be changed some time during the coming year.

Master Scale.

At this time I would call your attention to our urgent need for a master scale to weigh our test car and other test cars belonging to carriers, of which there are three. We have been very fortunate in the past in keeping our car so close to the standard that its weight has never been questioned. But owing to the increase in freight rates, and the high cost of grain and products and other commodities weighed over our track scale, we should be ready at any time to prove the correct weight of our car. Repairs are liable to be made at any time without my knowing of it, therefore this car should be weighed up at least once a month. A master scale will cost about \$10,000. I am advised that the Southern Pacific Company will install a new master scale at Oakland, California, the coming year at a cost of \$8,000, and also purchase a new test car to weigh 80,000 lbs.

In conclusion, I am pleased to state that during the coming year, the installation of a number of new track scales of the latest pattern and steel construction, both by carriers and industries, is contemplated.

Respectfully submitted,

GEORGE H. KAISER,
Scale Expert.

LIST OF SCALES TESTED.

LOCATION	Scale Number	Beam Equip.	Cap. Tons	Foundation	Date Tested	Error
NORTHERN PACIFIC RAILWAY COMPANY—						
South Tacoma, Wn.....	2,835	T. R.	100	Concrete..	Feb. 3, 1919	70 H
Tacoma, Head of Bay, Wn.....	E231,793	T. R.	150	Concrete..	Feb. 11, 1919	128 H
					June 4, 1919	50 L
Auburn No. 2, Wn.....	E35,050	T. R.	125	Concrete..	Feb. 4, 1919	.....
					Sept. 23, 1919	52 H
Auburn No. 1, Wn.....	E35,045	T. R.	125	Concrete..	Feb. 14, 1919	.....
					Sept. 23, 1919	.....
Seattle, Middle Yards, Wn.....	190,308	T. R.	100	Con. and Timber.	Feb. 24, 1919	216 H
					Sept. 13, 1919	84 H
Centralia, Wn.	E23,690	T. R.	125	Concrete..	Feb. 26, 1919	76 H
					July 7, 1919	64 L
Walla Walla, Wn.....	143,293	T. R.	80	Concrete..	Mar. 29, 1919	80 L
Spokane, Wn.	158,387	T. R.	100	Concrete..	Apr. 28, 1919	104 L
Cheney, Wn.	128,635	T. R.	125	Concrete..	June 10, 1919	112 H
South Tacoma, Wn.....	E239,064	T. R.	150	Concrete..	June 2, 1919	.....
Tacoma No. 3, Wn.....	E55,390	T. R.	100	Stone.....	June 3, 1919	.....
Tacoma No. 2, Wn.....	143,489	T. R.	100	Concrete..	June 5, 1919	.....
Seattle, Interbay, Wn.....	171,851	T. R.	100	Pile and Timber.	June 7, 1919	.....
Kanaskat, Wn.	E137,917	T. R.	125	Concrete..	June 10, 1919	112 H
Ole Elum, Wn.	E128,638	T. R.	125	Concrete..	June 11, 1919	.....
Wingate, Wn.	127,154	T. R.	100	Concrete..	June 25, 1919	188 L
Burnett, Wn.	E72,614	T. R.	100	Stone and Concrete.	June 26, 1919	195 L
Wilkeson, Wn.	None	T. R.	80	Concrete..	June 26, 1919	100 H
Hoquiam, Wn.	E18,043	T. R.	100	Concrete..	June 30, 1919	.....
Spokane, Wn.	E83,048	T. R.	125	Concrete..	July 15, 1919	192 L
Sumas, Wn.	140,241	T. R.	100	Concrete..	July 21, 1919	.....
Bellingham, Wn.	170,809	T. R.	100	Concrete..	July 24, 1919	72 L
Everett, Wn.	None	T. R.	100	Con. and Timber.	July 27, 1919	169 L
Seattle, 2nd Ave., Wn.....	191,239	T. R.	100	Concrete..	Sept. 19, 1919	64 H
Ellensburg, Wn.	E43,497	T. R.	100	Con. and Timber.	Sept. 24, 1919	136 H
Yakima, Wn.	None	T. R.	100	Concrete..	Sept. 25, 1919	.....
Yardley, Wn.	E35,039	T. R.	125	Concrete..	Nov. 19, 1919	.....
GREAT NORTHERN RAILWAY COMPANY—						
Tacoma, Wn.	175,739	T. R.	80	Pile and Timber.	Jan. 11, 1919	108 H
Spokane, Wn.	201,582	T. R.	100	Con. and Timber.	June 4, 1919	221 L
					Apr. 10, 1919	.....
Hillyard, Wn.	E128,500	T. R.	150	Concrete..	Apr. 11, 1919	155 H
South Bellingham, Wn.....	143,179	Plain	80	Wood.....	July 25, 1919	796 L
Burlington, Wn.	143,466	Plain	80	Con. and Timber.	July 26, 1919	.....
Delta, Wn.	3,643	T. R.	100	Concrete..	July 27, 1919	.....
Seattle, Interbay, Wn.....	107,086	T. R.	80	Pile and Timber.	July 28, 1919	.....
Leavenworth, Wn.	3,628	T. R.	100	Concrete..	Oct. 12, 1919	70 H
SPOKANE, PORTLAND & SEATTLE RAILWAY COMPANY—						
Vancouver, Wn.	7,813	T. R.	150	Concrete..	Dec. 27, 1918	.....
					Sept. 10, 1919	.....
Fallbridge, Wn.	175,272	T. R.	100	Concrete..	Mar. 26, 1919	68 H
SPOKANE & INLAND EMPIRE RAILWAY COMPANY—						
Spokane, Wn.	170,910	T. R.	100	Concrete..	Apr. 25, 1919	.....
SPOKANE INTERNATIONAL RAILWAY COMPANY—						
Spokane, Wn.	170,711	T. R.	100	Con. and Timber.	Apr. 4, 1919	.....
Eastport, Idaho	170,710	T. R.	100	Con. and Timber.	Apr. 7, 1919	.....
Sandpoint, Idaho	821,334	T. R.	100	Con. and Timber.	Apr. 8, 1919	.....

LIST OF SCALES TESTED—Continued.

LOCATION	Scale Number	Beam Equip.	Cap. Tons	Foundation	Date Tested	Error
NEWAUKUM VALLEY RAILROAD COMPANY— Onalaska, Wn.	E476,063	T. R.	100	Con. and Timber.	Sept. 12, 1919	52 L
HARTFORD & EASTERN RAILWAY COMPANY— Lake Stevens, Wn.	191,023	T. R.	100	Concrete..	July 10, 1919	.....
PACIFIC COAST RAILROAD COMPANY— Seattle, Wn.	202,636	T. R.	150	Concrete..	Feb. 18, 1919 June 20, 1919	60 H 80 L
Black Diamond, Wn.	None	T. R.	80	Concrete..	Feb. 19, 1919 Oct. 2, 1919	..... 120 H
Renton, Wn.	191,205	T. R.	100	Concrete..	Feb. 20, 1919	.....
Renton, Wn.	E486,467	T. R.	150	Concrete..	June 19, 1919	55 L
OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY— Seattle, Argo, Wn.	204,094	T. R.	100	Pile and Timber.	Jan. 27, 1919 Nov. 1, 1919	..... 64 L
Seattle, Wn.	E307,437	T. R.	100	Concrete..	Jan. 27, 1919	96 H
Walla Walla, Wn.	191,297	T. R.	100	Concrete..	Mar. 29, 1919	.....
Spokane, Wn.	E305,737	T. R.	100	Concrete..	Apr. 1, 1919	.....
Spokane, Wn.	190,275	T. R.	100	Con. and Timber.	Apr. 1, 1919	.....
Tekoa, Wn.	191,292	T. R.	100	Concrete..	Apr. 22, 1919	.....
Enaville, Idaho	190,580	T. R.	100	Con. and Timber.	Apr. 23, 1919	.....
Wallace, Idaho	191,308	T. R.	100	Concrete..	Apr. 24, 1919	60 L
Aberdeen, Wn.	199,603	T. R.	150	Concrete..	July 1, 1919	103 H
Cosmopolis, Wn.	E180,049	T. R.	150	Concrete..	July 1, 1919	55 H
Yakima, Wn.	199,646	T. R.	100	Concrete..	Sept. 25, 1919	50 L
CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY— Tacoma, Wn.	204,097	T. R.	100	Concrete..	Feb. 12, 1919	160 H
Seattle, Wn.	206,008	T. R.	100	Concrete..	Feb. 17, 1919 July 30, 1919	70 H 50 L
Spokane, Wn.	E137,796	T. R.	100	Concrete..	Apr. 14, 1919	70 H
Spirit Lake, Idaho.	170,911	T. R.	100	Con. and Timber.	Apr. 15, 1919	64 L
Newport, Wn.	190,055	T. R.	100	Con. and Timber.	Apr. 15, 1919	52 L
St. Mariss, Idaho.	134,313	T. R.	100	Concrete..	Apr. 17, 1919	55 L
St. Joe, Idaho.	190,596	Plain	100	Concrete..	Apr. 17, 1919	45 L
Elk River, Idaho.	E128,541	T. R.	100	Concrete..	Apr. 19, 1919	.....
McKenna, Wn.	175,577	Plain	80	Concrete..	July 10, 1919	.....
PUGET SOUND & WILLAPA HARBOR RAILWAY COMPANY— Centralia, Wn.	E286,739	T. R.	100	Concrete..	July 8, 1919	45 H
BELLINGHAM & NORTHERN RAILWAY COMPANY— Sumas, Wn.	600,762	T. R.	100	Concrete..	July 21, 1919	.....
Bellingham, Wn.	204,004	T. R.	100	Concrete..	July 23, 1919	80 L
WASHINGTON, IDAHO & MONTANA RAILWAY COMPANY— Potlatch, Idaho	158,387	T. R.	100	Concrete..	Apr. 19, 1919	.....

LIST OF SCALES TESTED—Continued.

LOCATION	Scale Number	Beam Equip.	Cap. Tons	Founda-tion	Date Tested	Error
INDUSTRIAL TRACK SCALES.						
PASCO FLOUR MILLS— Pasco, Wn.	E289,457	T. R.	100	Con. and Timber.	Mar. 28, 1919	64 H
FALL CITY MILL AND FEED CO.— Spokane, Wn.	154,835	T. R.	80	Concrete..	Apr. 28, 1919	56 L
CENTENNIAL MILL COMPANY— Spokane, Wn.	143,462	T. R.	100	Stone and Timber.	Apr. 2, 1919	.....
SPOKANE FLOUR MILL— Spokane, Wn.	175,600	T. R.	100	Trestle....	Apr. 2, 1919	.....
RITZVILLE FLOUR MILLS— Ritzville, Wn.	E49,962	T. R.	100	Con. and Timber.	Apr. 30, 1919 Nov. 12, 1919	52 L
VANCOUVER FLOUR MILLS— Vancouver, Wn.	E486,601	T. R.	100	Concrete..	May 5, 1919 Sept. 10, 1919	68 H
SEATTLE FLOUR MILLS— Seattle, Wn.	None	T. R.	60	Con. and Timber.	July 30, 1919	.....
Seattle, Wn.	E600,427	T. R.	100	Concrete..	Sept. 19, 1919	.....
WENATCHEE MILLING COMPANY— Wenatchee, Wn.	190,865	T. R.	100	Concrete..	Oct. 13, 1919	56 H
SPRAGUE ROLLER MILLS— Sprague, Wn.	135,528	T. R.	80	Concrete..	Nov. 14, 1919	.....
WASHINGTON GRAIN AND MILLING COMPANY— Reardan, Wn.	E35,043	T. R.	100	Con. and Timber.	Nov. 17, 1919	140 L
INLAND EMPIRE PAPER COMPANY— Millwood, Wn.	196,639	T. R.	100	Concrete..	Apr. 5, 1919	72 H
CITY OF SEATTLE— Seattle, Georgetown, Wn.....	191,434	T. R.	100	Concrete..	June 16, 1919	60 L
PHILIPPINE VEGETABLE OIL COM-PANY— Tacoma, Wn.	E608,638	T. R.	100	Concrete..	June 23, 1919	.....
CLEAR LAKE LUMBER COMPANY— Clear Lake, Wn.....	128,581	T. R.	100	Concrete..	July 19, 1919	76 H
BLOEDEL DONOVAN LUMBER COM-PANY— Larson, Wn.	E46,946	T. R.	100	Concrete..	July 23, 1919	.....
OLYMPIC PORTLAND CEMENT COM-PANY— Bellingham, Wn.	E50,899	T. R.	100	Concrete..	July 25, 1919	76 H
THE G. M. STANDIFER CONSTRUC-TION COMPANY— Vancouver, Wn.	E275,350	T. R.	100	Concrete..	Jan. 25, 1919	100 H
GRIFFIN WHEEL COMPANY— South Tacoma, Wn.....	840,606	T. R.	100	Concrete..	Feb. 3, 1919 May 31, 1919	72 H 88 L
PACIFIC COAST STEEL COMPANY— Seattle, Wn.	E486,467	T. R.	150	Concrete..	Feb. 22, 1919	60 H

LIST OF SCALES TESTED—Concluded.

LOCATION	Scale Number	Beam Equip.	Cap. Tons	Founda- tion	Date Tested	Error
PACIFIC CAR AND FOUNDRY COM- PANY— Renton, Wn.	E128,581	T. R.	100	Concrete..	June 19, 1919	.....
VULCAN MANUFACTURING COMPANY— Seattle, Wn.	E586,400	T. R.	100	Concrete..	Aug. 1, 1919	.....
AMERICAN SMELTERS SECURITIES COMPANY— Ruston, Wn.	E333,359	T. R.	150	Concrete..	Jan. 30, 1919	128 H
Ruston, Wn.	E79,457	T. R.	100	Concrete..	Oct. 27, 1919	.....
Ruston, Wn.	162,617	T. R.	100	Concrete..	Jan. 31, 1919	128 H
DRUMMOND LIGHTERAGE COMPANY— Seattle, Wn.	740,553	T. R.	100	Concrete..	Oct. 27, 1919	.....
RENTON COAL COMPANY— Renton, Wn.	196,720	T. R.	100	Concrete..	Jan. 31, 1919	88 H
RAVEN COAL COMPANY— Ravendale, Wn.	1,041,434	T. R.	100	Concrete..	Feb. 21, 1919	128 H
PACIFIC COAL COMPANY— Issaquah, Wn.	E55,134	T. R.	100	Concrete..	June 18, 1919	104 L
CENTRAL COAL COMPANY— Grand Ridge, Wn.	1,021,425	T. R.	100	Concrete..	Oct. 3, 1919	84 L
UNITED COAL SALES COMPANY— Seattle, Wn.	166,332	T. R.	100	Concrete..	June 9, 1919	.....
RAINIER PRODUCTS COMPANY— Seattle, Wn.	191,217	T. R.	100	Concrete..	Oct. 7, 1919	.....
UTAH IDAHO SUGAR COMPANY— Yakima, Wn.	346,876	T. R.	100	Concrete..	Oct. 8, 1919	168 H
Toppenish, Wn.	E520,303	T. R.	100	Wood.....	Oct. 16, 1919	128 H
Sunnyside, Wn.	None	T. R.	100	Con. and Timber.	Oct. 16, 1919	128 H
					Sept. 27, 1919	.....
					Sept. 26, 1919	.....
					Sept. 27, 1919	64 L
					Nov. 7, 1919	.....

STATUS OF CASES IN COURT.

Olympia, Wash., November 25, 1919.

Public Service Commission, Olympia, Washington.

Gentlemen: We are enclosing herewith a compilation of the Commission's cases pending in the various courts and those disposed of since November 30, 1918.

Yours respectfully,

R. M. BURGUNDER,
Assistant Attorney General.

PENDING CASES.

In the Supreme Court of the State of Washington.

State ex rel. Tacoma & Eastern Railway Company v. Public Service Commission. Reparation case. Superior court quashed writ of review for lack of jurisdiction. Appealed to and reversed by supreme court. Superior court affirmed Commission on merits. Appealed to supreme court.

State ex rel. Great Northern Railway v. Public Service Commission. An appeal by the railway from an order of the superior court sustaining Commission in re back haul on grain milled in transit.

State ex rel. City of Seattle v. Public Service Commission; State ex rel. City of Tacoma v. Public Service Commission. Consolidated appeal from judgment of superior court affirming Commission in review of order adopting Burleson telephone rates. Appeal involves jurisdiction of Commission over telephones while under federal control.

Willapa Power Company v. Public Service Commission and Willapa Electric Company. Injunction and damages for violation of rate orders. Superior court dismissed action and plaintiff appealed.

In the Superior Courts of the State of Washington.

State ex rel. Great Northern Railway v. Public Service Commission. Thurston county. A review concerning location of station at Chelan. This case was continued by stipulation between the railway company and the city of Chelan to May 1, 1920.

State ex rel. Washington Power, Light & Water Company v. Public Service Commission. Thurston county. Review of valuation made by the Commission on the Anacortes Water Company. Pending.

State ex rel. Liberty Bay Transportation Company v. Public Service Commission. Thurston county. Review re boat schedule. Commission sustained but judgment not entered.

State ex rel. Hurley et al. v. Public Service Commission. Spokane county. Proceeding to prohibit Commission from fixing rates for water furnished by Liberty Lake Company. Plaintiff will dismiss case.

State ex rel. Public Service Commission v. Northwest Telephone Company and Florence-Rae Lumber, Land & Development Company. Thurston county. Mandamus proceeding to compel companies to give through telephone service. Pending decision of Commission in proceeding before it involving the same matter.

State of Washington v. McPherson Bros. Company, a corporation. Okanogan county. Action for penalty for failure to comply with direction of Commission regarding ferry service.

State ex rel. McPherson Bros. Company, a corporation, v. Public Service Commission. Okanogan county. Review of order requiring additional ferry service. Pending on motion to quash for lack of jurisdiction.

Willapa Electric Company v. Public Service Commission. Thurston county. Action to review notice of Commission and to restrain Commission from taking action to enforce order fixing rates pending decision in another case in supreme court.

State ex rel. Public Service Commission v. Willapa Power Company. Thurston county. Proceeding to compel compliance with order of Commission fixing rates for residence and commercial lighting.

State of Washington v. Willapa Electric Company. Thurston county. Penalty action for violation of order fixing lighting rates.

Northwest Telephone Company v. Public Service Commission. Thurston county. Review of order of Commission requiring physical connection of telephones.

CASES DISPOSED OF SINCE NOVEMBER 30, 1918.

In the Supreme Court of the United States.

State ex rel. Puget Sound and Willapa Harbor Railway Company v. Public Service Commission. Appeal from supreme court of the State of Washington reversing Commission's order in apportionment of costs of a safety device at a railway grade crossing. Affirmed.

Northern Pacific Railway Company and Walker D. Hines as Director General of Railways v. State of North Dakota ex rel. Wm. Langer, Attorney General. Writ of error to supreme court of North Dakota in an action testing right of state commissions to regulate rates, fares and charges of common carriers during period of federal control of railroads. W. V. Tanner, special counsel for Commission, assisted attorney general of North Dakota in this case and Public Service Commission also joined in brief of amicus curiae. Decision denied right of state to regulate intrastate rates.

In the United States District Courts.

Puget Sound Traction, Light and Power Company v. Public Service Commission and W. V. Tanner. Alki Point case. Following decision of supreme court of the United States on certain portions of the decision of the federal court, case was dismissed when city of Seattle purchased street railway system.

Consumers Ditch Company v. Public Service Commission. Action to enjoin enforcement of rate and valuation order of Commission. Permanent injunction entered.

In the Supreme Court of the State of Washington.

State ex rel. Tacoma & Eastern Railway v. Public Service Commission and Northern Pacific Railway. Appeal from judgment of the superior court relating to the Commission's apportionment of the cost of an interlocking device at a grade crossing at Camp Lewis. Affirmed.

State ex rel. City of Seattle v. Public Service Commission and Seattle Lighting Company. Appeal from order of the superior court sustaining the Commission in granting increased gas rates in the city of Seattle. Affirmed.

In the Superior Courts of the State of Washington.

Consumers Ditch Company v. Public Service Commission. Thurston county. Review of order of Commission fixing rates. Dismissed following decision in federal court between same parties.

Consumers Ditch Company v. Public Service Commission. Benton county. Review of valuation order of Commission. Dismissed following decision in federal court involving same parties.

Northern Pacific Railway Company v. Public Service Commission and Seattle Pole and Pile Company. Thurston county. Review concerning order of Commission awarding reparation. Commission reversed by superior court. Appeal to be dismissed.

State ex rel. O.-W. R. & N. Railway v. Public Service Commission. Thurston county. Review of order of Commission concerning overcharges made to North River Timber Company. Court sustained Commission but review quashed upon payment by railway company of amount of overcharges.

State of Washington ex rel. Public Service Commission v. Chicago, Milwaukee & St. Paul Railway, Great Northern Railway, Northern Pacific Railway, Oregon-Washington Railway & Navigation Company and Pacific Coast Railway. Thurston county. Injunction proceeding to determine legality of intrastate railroad rates established by director general. Dismissed and new case instituted.

State of Washington ex rel. Public Service Commission v. Northern Pacific Railway Company. Thurston county. Action to restrain railway company from violating order suspending switching charges in Tacoma, increased by director general. Dismissed following decision of supreme court of the United States.

State of Washington v. Northern Pacific Railway Company. Thurston county. Penalty action for violating suspension order of Commission concerning increased switching rates in Tacoma under federal control. Dismissed following decision of supreme court of United States.

State of Washington ex rel. Public Service Commission v. Chicago, Milwaukee & St. Paul Railway, Great Northern Railway, Northern Pacific Railway, Oregon-Washington Railway & Navigation Company and Pacific Coast Railway. Thurston county. Injunction proceeding to determine legality of intrastate railroad rates established by director general. Dismissed following decision of United States supreme court.

State ex rel. City of Toppenish v. Public Service Commission. Yakima county. Review of order of Commission denying grade crossing. Remanded to Commission for further proceedings.

State ex rel. Cheadle et al. v. Public Service Commission et al. Thurston county. Review order of Commission dismissing complaint to require Port Blakely Mill Company to accept shingles for transportation. Commission affirmed.

State ex rel. Public Service Commission v. McPherson Bros. Company, a corporation. Proceeding to compel compliance with direction of Commission requiring additional ferry service. Dismissed on compliance with direction of Commission.

LIST OF LICENSED WAREHOUSES

Operator and Address	State No.	Station
Abshier & Niva, Centerville.....	309	Centerville, Klickitat
Actor Warehouse Co., Starbuck.....	758	Starbuck, Columbia
Albion Warehouse & Merc. Co., Albion	546	Albion, Whitman
Almira Farmers Whse. Co., Almira..	179	Almira, Lincoln
	180	Govan, Lincoln
	181	Hanson, Grant
Almira Trading Co., Almira.....	385	Almira, Lincoln
	386	Almira, Lincoln
	387	Almira, Lincoln
Alrich, F. J. (private), Waitsburg..	13	Alto, Columbia
Anderson, Walter A., Connell.....	407	Eltopia, Franklin
Arlington Lumber Co., Arlington, Ore.	533	Roosevelt, Klickitat
	698	Sundale, Klickitat
Armington, Warren, Spokane.....	B-6	N. 400 Division Av., Spokane
Ballor, E. S., Oakesdale.....	321	Oakesdale, Whitman
Bassett, Chas. S., Washtucna.....	32	Washtucna, Adams
Becker, J. E., Colton.....	388	Colton, Whitman
Beckwith, O. A., Penewawa.....	542	Rice's Bar, Garfield
Benge Elevator Co., Benge.....	790	Benge, Adams
Bentley, L. A., Irby.....	672	Irby, Lincoln
Berryman, Paul L., R. F. D. No. 1, Prescott	488	Prescott, Walla Walla
Big Bend Milling Co., Davenport....	530	Fellows, Lincoln
	531	Davenport, Lincoln
	532	Davenport, Lincoln
	663	Omans, Lincoln
Bluestem Grain Co., Bluestem.....	334	Bluestem, Lincoln
	335	Bluestem, Lincoln
	599	Bluestem, Lincoln
Bluestem Union Warehouse Co., Washtucna	653	Washtucna, Adams
Bolles Junction Whse. Co., Waits- burg	670	Rolles Junction, Walla Walla
Boozer, Frank, Asotin.....	665	Asotin, Asotin
Bouska, Joseph & Son (private), Bridgeport	7	Bridgeport, Douglas
Boyd-Conlee Co., Spokane.....	786	Mead, Spokane
Braman, V. A., Rosalia.....	720	Rosalia, Whitman
Burrcan Elev. Co., Snake River.....	741	Burr Canyon, Franklin
Cation, A. M., Walla Walla.....	389	Spring Creek, Walla Walla
Catlin, H. H., Tonasket.....	742	Tonasket, Okanogan
Centerville Elev. Co., Centerville...	257	Warwick, Klickitat
	715	Centerville, Klickitat

Operator and Address	State No.	Station
Chambers Whse. Elev. & Merc. Co. (mail to J. E. Barbee, R. F. D. No. 3), Pullman.....	197	Chambers, Whitman
Chapman, W. E., Canyon.....	713	Canyon, Whitman
Cheney Union Whse. Co., Cheney...	330	Cheney, Spokane
	331	Cheney, Spokane
Chesaw Grain Co., Chesaw.....	776	Chesaw, Okanogan
Clyde Warehouse Co., (care Pax- ton Bros.), Walla Walla.....	8	Clyde, Walla Walla
Clodius & McCown, Waitsburg.....	586	Coppei, Walla Walla
Colfax Milling Co., Colfax.....	391	Thornton, Whitman
	392	Cashup, Whitman
	393	Steptoe, Whitman
	394	Blackwell, Whitman
	395	Manning, Whitman
	396	Colfax, Whitman
Colton Warehouse Co., Colton.....	422	Colton, Whitman
Columbia River Mlg. Co., Wilbur...	348	Govan, Lincoln
	519	Almira, Lincoln
	520	Govan, Lincoln
	521	Wilbur, Lincoln
Corbett, L. C., Huntsville.....	399	Huntsville, Columbia
Cox & Brandon, Hay.....	714	Hay, Whitman
Creston Union Grain Co., Creston...	211	Creston, Lincoln
Crow, Robinson & Co., Oakesdale...	36	Oakesdale, Whitman
Davenport Grain Co., Davenport....	269	Davenport, Lincoln
	270	Omans, Lincoln
Davenport Union Warehouse Co., Davenport	155	Mondovi, Lincoln
	289	Davenport, Lincoln
	290	Davenport, Lincoln
Davis, Frank, Dayton.....	400	Dayton, Columbia
Davis, Luster R., St. John.....	535	Willada, Whitman
	536	Juno, Whitman
Dayton Co-Operative Whse. Co., Dayton	224 1/2	Dayton, Columbia
	225	Dayton, Columbia
	621	Longs, Columbia
Ditmar, Josephine, Davenport.....	738	Ditmar, Lincoln
Dodge, Chas., Pomeroy.....	667	Dodges Siding, Garfield
Donaldson, N. C. (R. F. D. No. 2), Pomeroy	477	Pomeroy, Garfield
Drew, Wm., Tyler.....	263	Tyler, Spokane
Dry Coulee Union Grain Co., Adrian.	402	Forreys, Grant
Dunnigan, P. J. (private), Connell..	640	Sulphur, Franklin
	641	Estes, Franklin
Earl & Roup Bros., Asotin.....	655	Couse Creek, Asotin
Edwall Grain & Elev. Co., Edwall...	4	Edwall, Lincoln
Edwards, J. R. (mail with Walla Walla Farmers Agency), Walla Walla	774	Adkins, Walla Walla

Operator and Address	State No.	Station
Elberton Milling & Power Co., Elberton	692	Elberton, Whitman
Empire Elevator Co., Pullman	716	Pullman, Whitman
Empire Grain Co., Kennewick	646	Kiona, Benton
	649	Kennewick, Benton
	746	Erie, Benton
	789	Prosser, Benton
Endicott Union Elev. Co., Endicott ..	288	Endicott, Whitman
Ewan Elevator Co., Ewan	383	Ewan, Whitman
Fairbanks Inc. Whse. Co., Fairbanks	503	Seabury, Whitman
	588	Fairbanks, Whitman
Fair & McMorris Whse. Co., Dayton.	200	Turner, Columbia
	793	Dayton, Columbia
	10	Longs, Columbia
Fairfield Farmers Alliance Whse. & Elev. Co., Fairfield	525	Fairfield, Spokane
	526	West Fairfield, Spokane
Farmers Warehouse Co., Farm- ington	63	Hayfield, Whitman
	427	Farmington, Whitman
	428	Farmington, Whitman
	610	Farmington, Whitman
Farmers Corporation, Coulee City ...	425	Coulee City, Grant
	666	Coulee City, Grant
Farmers Elevator Co., Waterville ...	736	Waterville, Douglas
Farmers Grain & Produce Co., Valleyford	753	Valleyford, Spokane
Farmers Grain & Fruit Growers Union, Rockford	196	Rockford, Spokane
Farmers Independent Grain & Produce Co., Waukon	580	Waukon, Lincoln
Farmers Union Whse. Co., Palouse ..	192	Palouse, Whitman
	193	Palouse, Whitman
	195	Palouse, Whitman
	673	Palouse, Whitman
	699	Palouse, Whitman
Farmers Union Whse. Co. of Glen- wood, Elberton	572	Glenwood, Whitman
Farmers Union Grain Co., Hartline ..	268	Hartline, Grant
Farmers Union Grain & Lumber Co., Odessa	191	Batum, Adams
Farmers Union Grain & Supply Co., Latah	687	Latah, Spokane
Farmers Union Whse. Co. of Col- ton (Box 65), Colton	421	Colton, Whitman
Farmers Union Whse. Co. of Mockonema, Colfax	639	Mockonema, Whitman
Farmers Warehouse Co., Lamar	517	Lamar, Walla Walla
Farmers Whse. Assn. of Asotin County, Asotin	668	

Operator and Address	State No.	Station
Farmers Whse. Co. of Fallons (R. F. D. No. 4), Palouse.....	260	Fallons, Whitman
	261	Fallons, Whitman
	529	Palouse, Whitman
Farmers Whse. Co., Spring Valley...	545	Spring Valley, Spokane
Farnsworth, F. P., Riverside.....	677	Oroville, Okanogan
Fields, J. K., Hatton.....	175	Hatton, Adams
	560	Hatton, Adams
	770	Hatton, Adams
Fletcher, Frank, Dayton.....	771	Longs, Columbia
Fry, Ernest W., Prosser.....	199	Byron, Yakima
	264	Prosser, Benton
	617	Byron, Yakima
	695	Biggam, Benton
	766	Whitstraw, Benton
Gang-miller Produce Co., Toppenish.	748	Toppenish, Yakima
Garfield Union Whse. Co., Garfield..	231	Garfield, Whitman
	537	Grinnell, Whitman
	538	Ladow, Whitman
	539	Garfield, Whitman
	540	Crabtree, Whitman
	541	Sokulk, Whitman
	543	Walters, Whitman
	544	Eden, Whitman
Glenwood Merc. Co., Riverside.....	651	Riverside, Okanogan
Goodrich, L. J. (private), Toppenish	587	Toppenish, Yakima
Graingrowers Whse. Co., Wilbur...	384	Wilbur, Lincoln
Gravelle Farmers El. Co., Gravelle..	791	Gravelle, Lincoln
Green Valley Union Whse. Co., Ephrata	355	Ephrata, Grant
	555	Ephrata, Grant
Griffith Union Grain & Trading Co., Ruff	69	Ruff, Grant
	596	Laing, Grant
Guy Farmers Alliance Whse. Co., Albion	614	Albion, Whitman
Hadley Warehouse Co. (care Walla Walla Farmers Agency), Walla Walla	480	Hadley, Walla Walla
Hall, Geo. W., Steptoe.....	735	Steptoe, Whitman
Harris & Jones (R. F. D. No. 2, Box No. 3), Tekoa.....	722	Seltice, Whitman
Hartline Mill & Elevator Co., Hartline	267	Hartline, Grant
	523	Hartline, Grant
Hilliard & Button, Uniontown.....	328	Uniontown, Whitman
Hyatt, DeRemer & Cantrell (pri- vate), Toppenish	733	Toppenish, Yakima
Huff, E. T. & C. M., Albion.....	11	Albion, Whitman
Ilia Warehouse & Milling Co., Clarkston	620	Ilia, Garfield

Operator and Address	State No.	Station
Interior Warehouse Co., Portland, Ore.	217	Almota, Lincoln
	220	Curry, Franklin
	221	Canyon, Whitman
	222	Centerville, Klickitat
	223	Connell, Franklin
	224	Colfax, Whitman
	226	Diamond, Whitman
	227	Eltopia, Franklin
	229	Estes, Whitman
	233	Hooper, Whitman
	234	Interior, Whitman
	236	Kahlotus, Franklin
	237	La Crosse, Whitman
	238	Mesa, Franklin
	243	Oakesdale, Whitman
	244	Oakesdale, Whitman
	245	Patterson, Benton
	250	Sulphur, Franklin
	251	Spangle, Spokane
	252	St. John, Whitman
	254	Thera, Whitman
	255	Thornton, Whitman
	256	Thornton, Whitman
	258	Washtucna, Adams
	259	Willada, Whitman
Irby Union Whse. Co., Irby.....	558	Irby, Lincoln
	559	Irby, Lincoln
Jackson, J. L., Starbuck.....	757	Jackson, Columbia
Jantz Grain Co., Ruff.....	750	Jantz, Grant
Jennings, C. E., Pullman.....	784	Busbey, Whitman
Johnson Union Whse. Co., Johnson..	645	Johnson, Whitman
Jones-Scott Co., Walla Walla.....	478	Russell, Walla Walla
Jahn, W. F. & Co., Seattle.....	B-12	Seattle, King
Kahlotus Grain & Supply Co., Kahlotus	557	Kahlotus, Franklin
	726	Kahlotus, Franklin
Kelso Bros., Kiona.....	212	Kiona, Benton
	213	Kiona, Benton
	214	Badger, Benton
Kennedy, Robt., Sr. (private), Walla Walla	775	Hector, Walla Walla
Kenworthy, W. H. & Son, South Tacoma	710	Parker, Yakima
Kerr, Gifford Whse. Co., Portland, Oregon	403	Thornton, Whitman
	404	Roosevelt, Klickitat
	405	Sprague, Lincoln
	406	Keystone, Adams

Operator and Address	State No.	Station
Kerr, Gifford Whse. Co., Portland...	456	Sunset, Whitman
	536	Juno, Whitman
	548	Mt. Hope, Spokane
	567	Pullman, Whitman
	568	Busbey, Whitman
	569	Whelan, Whitman
	570	Kitzmilller, Whitman
Kleinburg, Henry & Co., Ellensburg.	780	Ellensburg, Kittitas
	781	Kittitas, Kittitas
	782	Holmes, Kittitas
Klickitat Farmers Warehouse Co., Goldendale	584	Goldendale, Klickitat
Kludas & Foster Grain Co., Connell.	220	Curry, Franklin
	223	Connell, Franklin
	227	Eltopia, Franklin
	238	Mesa, Franklin
	250	Sulphur, Franklin
Knettle, E. E., Pomeroy	609	Zumwalt, Garfield
Krupp Union Whse. Co., Krupp....	265	Krupp, Grant
Karr Investment Co. (private), North Yakima	177	Mabton, Yakima
La Crosse Elev. & Produce Co., La Crosse	377	La Crosse, Whitman
La Crosse Roller Mills, La Crosse...	165	La Crosse, Whitman
Lamont Farmers Union Elev. & Whse. Co., Lamont	476	Lamont, Whitman
Lawson, L. H., Lyle	723	Lyle, Klickitat
Lee, G. E., Penewawa	721	Penewawa, Whitman
Lenhart & Co. (R. F. D. No. 1, Box 30-B), Irby	656	Moody, Adams
Leonard, B. D., Dayton	611	Dayton, Columbia
	612	Dayton, Columbia
Levey Elevator Co., Page	484	Levey, Franklin
Lewiston Milling Co. (private), Lewiston, Idaho	763	North Yakima, Yakima
	764	North Yakima, Yakima
Lilly, The Chas. H. Co., Seattle	582	Wapato, Yakima
	583	Ellensburg, Kittitas
Long, J. O., Pomeroy	669	Pomeroy, Garfield
Lyle Grain Co., Lyle	381	Lyle, Klickitat
	382	Lyle, Klickitat
Leach, S. G., Garfield	24	Garfield, Whitman
Mabton Milling Co., Mabton	684	Mabton, Yakima
Mabton Elevator Co., Mabton	787	Mabton, Yakima
MacDonald, Hale & Co., Seattle	434	Quincy, Grant
	624	Douglas, Douglas
	625	Mansfield, Douglas
	626	Supplee, Douglas
	627	Waterville, Douglas

Operator and Address	State No.	Station
MacDonald, Hale & Co., Seattle.....	628	Withrow, Douglas
	629	Quincy, Grant
	630	Ephrata, Grant
	631	Krupp, Grant
	632	Othello, Adams
	634	Ruff, Grant
	635	Bruce, Adams
	636	Mabton, Yakima
	637	Wheeler, Grant
	648	Quincy, Grant
	696	Tonasket, Okanogan
Mansfield	719	Monse, Okanogan
Mansfield Elev. & Whse. Co.,		
Mansfield	324	Mansfield, Douglas
	326	Touhey, Douglas
	747	Mansfield, Douglas
Marcellus Farmers Elev. Co.,		
Marcellus	578	Marcellus, Adams
Martin, F. M., Gr. & Mfg. Co.,		
Cheney	423	Cheney, Spokane
	424	Cheney, Spokane
Maxwell, W. W. (701 So. Palouse		
St.), Walla Walla.....	70	Adkins, Walla Walla
Mayview Tramway Co., Wawawai...	607	Wawawai, Whitman
McCaw, E. M., Prescott.....	752	Prescott, Walla Walla
McComas, E. W., Pendleton, Ore....	460	Wallula, Walla Walla
	461	Wallula, Walla Walla
McCormick, W. W., Corfu.....	432	Corfu, Grant
McCoy, J. H., Oakesdale.....	426	Fletcher, Whitman
McFarland, C. W., Palouse.....	654	Palouse, Whitman
Miller, Mark P., Milling Co.,		
Moscow, Idaho	1	Chambers, Whitman
	2	Chambers, Whitman
	3	Ringo, Whitman
	562	Oakesdale, Whitman
	563	Oakesdale, Whitman
	618	Comans, Whitman
	613	Staley, Whitman
Miller, L. R., Pullman.....		
Milwaukee Grain Elevator Co.,		
Seattle	271	Ewan, Whitman
	272	Kenova, Whitman
	273	Lavista, Whitman
	274	Lind, Adams
	275	Palisade, Whitman
	276	Pine City, Whitman
	277	Pizzarro, Adams
	278	Ralston, Adams
	A-1	Tacoma, Pierce
	147	Supplee, Douglas

Operator and Address	State No.	Station
Milwaukee Grain Elev. Co., Seattle..	527	Pandora, Whitman
	148	Withrow, Douglas
	149	Mansfield, Douglas
	144	Alstown, Douglas
	145	Douglas, Douglas
	146	Waterville, Douglas
	279	Roxboro, Adams
	280	Schragg, Adams
	281	Schafer, Adams
	282	Squaw Canyon, Whitman
	284	Vassar, Adams
	675	Malden, Whitman
Mitchell, Robt. K., Slater.....	189	Welland, Walla Walla
Mohler Union Whse. Co., Mohler...	487	Mohler, Lincoln
Molson Union Elevator Co., Molson..	688	Molson, Okanogan
Montgomery, E. E., Goldendale.....	230	Goldendale, Klickitat
Muir, Jas., Wilbur.....	463	Wilbur, Lincoln
Mustard & Bailor, Oakesdale.....	734	Oakesdale, Whitman
McCroskey, Fred H., Colfax.....	691	Colfax, Whitman
Nass & Harris, Alfalfa.....	662	Alfalfa, Yakima
Northern Grain & Warehouse Co., Portland	286	Thiel, Walla Walla
	489	Garfield, Whitman
	490	Garfield, Whitman
	491	Grinnell, Whitman
	492	Walters, Whitman
	493	Crabtree, Whitman
	494	Stoneham, Whitman
	495	Elberton, Whitman
	496	Cedar Creek, Whitman
	497	Rosalia, Whitman
	498	Rockford, Spokane
	499	Tilma, Whitman
	500	Geary, Whitman
	501	Steptoe, Whitman
	502	Cashup, Whitman
	504	Balder, Whitman
	505	Tekoa, Whitman
Northern Grain & Warehouse Co., Portland	506	Lamont, Whitman
	507	Kahlotus, Franklin
	508	Stoner, Whitman
	509	Windust, Franklin
	510	Page, Franklin
	511	McAdams, Franklin
	512	Burr Canyon, Franklin
	513	Snake River Junction, Franklin
	595	Alderdale, Klickitat

Operator and Address	State No.	Station
Northern Grain & Whse. Co., Portland	619	Oakesdale, Whitman
	659	Buckley, Spokane
	676	Longwill, Whitman
	683	Manito, Spokane
	689	Rodna, Spokane
	729	Revere, Whitman
	730	Pifer, Adams
	731	Tekoa, Whitman
Northwestern Dock Co., Tacoma	B-14	Tacoma, Pierce
Oakley, J. M., Waukon	573	Waukon, Lincoln
Odessa Union Warehouse Co., Odessa	416	Odessa, Lincoln
	417	Odessa, Lincoln
	418	Nemo, Lincoln
	420	Lauer, Adams
	439	Lauer, Adams
Oehlschlaeger, P. F., Connell	739	Curry, Franklin
Olwell, E. L., Coulee City	64	Mansfield, Douglas
	65	Coulee City, Douglas
Omak Mercantile Co., Omak	749	Omak, Okanogan
O'Neill Grain Co., Spokane	170	Spangle, Spokane
	171	Sprague, Lincoln
	172	Keystone, Adams
	173	Ritzville, Adams
	174	Cunningham, Adams
	176	Mabton, Yakima
	616	Tokio, Adams
Pacific Coast Elevator Co., Portland, Ore.	12	Armstrong, Whitman
	14	Benge, Adams
	15	Connell, Franklin
	16	Colfax, Whitman
	17	Diamond, Whitman
	20	Estes, Franklin
	21	Ennis, Walla Walla
	24	Garfield, Whitman
	25	Glenwood, Whitman
	27	Juno, Whitman
	28	Kahlotus, Franklin
	30	Lowdens, Walla Walla
	33	Mockonema, Whitman
	34	Mockonema, Whitman
	35	McAdams, Franklin
	39	Pomeroy, Garfield
	40	Shawnee, Whitman
	41	Sheffler, Walla Walla
	42	Sulphur, Franklin
	44	Sunset, Whitman
	45	St. John, Whitman

Operator and Address	State No.	Station
Pacific Coast Elev. Co., Portland....	47	.....Thera, Whitman
	48	.....Thornton, Whitman
	49	.....Touchet, Walla Walla
	50	....Valley Grove, Walla Walla
	51	....Valley Grove, Walla Walla
	52	....Walla Walla, Walla Walla
	53	.....Walkers, Walla Walla
	54	.....Whitman, Walla Walla
	55	.....Washtucna, Adams
	56	.....Winona, Whitman
	57	.....Willada, Whitman
	71	.....Eureka, Walla Walla
	72	.....Elwood, Walla Walla
	73	.....Clyde, Walla Walla
	74	.....Reser, Walla Walla
	75	..Pleasant View, Walla Walla
	76	.....Lamar, Walla Walla
	77	.....Shaw, Walla Walla
	78	.....Paddock, Walla Walla
	79	.....Climax, Walla Walla
	80	.....Rulo, Walla Walla
	81	.....Thiel, Walla Walla
	82	.....Dry Creek, Walla Walla
	83	.....Dry Creek, Walla Walla
	84	.....Sudbury, Walla Walla
	85	.....Harberts, Walla Walla
	86	.....Tracy, Walla Walla
	87	.....Rifle, Walla Walla
	88	.....Dixie, Walla Walla
	90	.....Eastman, Walla Walla
	91	.....Minnick, Walla Walla
	92	.....Minnick, Walla Walla
	93	.....Hatton, Adams
	94	.....Cunningham, Adams
	96	.....Ritzville, Adams
	97	.....Tokio, Adams
	98	.....Keystone, Adams
	99	.....Sprague, Lincoln
	100	.....Tyler, Spokane
	101	.....Hite, Spokane
	102	.....Reardan, Lincoln
	103	.....Mondovi, Lincoln
	104	.....Davenport, Lincoln
	105	.....Omans, Lincoln
	106	.....Gravelle, Lincoln
	107	.....Ditmar, Lincoln
	108	.....Rocklyn, Lincoln
	109	.....Creston, Lincoln

Operator and Address	State No.	Station
Pacific Coast Elev. Co., Portland....	110	Wilbur, Lincoln
	111	Govan, Lincoln
	113	Hartline, Grant
	114	Spangle, Spokane
	115	Plaza, Spokane
	116	North Pine, Grant
	117	Rosalia, Whitman
	118	Donohoe, Whitman
	119	McCoy, Whitman
	122	Whelan, Whitman
	123	Kitzmilller, Whitman
	124	Pullman, Whitman
	125	Sunshine, Whitman
	126	Busbey, Whitman
	127	Chambers, Whitman
	129	Colton, Whitman
	130	Uniontown, Whitman
	131	Leon, Whitman
	132	Espanola, Spokane
	133	Waukon, Lincoln
	134	Edwall, Lincoln
	135	Canby, Lincoln
	136	Bluestem, Lincoln
	137	Mohler, Lincoln
	138	Downs, Lincoln
	139	Lamona, Lincoln
	140	Irby, Lincoln
	141	Ephrata, Grant
	202	Hartline, Grant
	260	Fallons, Whitman
	261	Fallons, Whitman
	475	Matthews, Walla Walla
	535	Willada, Whitman
	697	Leon, Whitman
	68	Rodna, Spokane
	182	Pomeroy, Garfield
	183	Pomeroy, Garfield
	184	Parvin, Whitman
	185	Almota, Whitman
	186	Diamond, Whitman
	215	Stoner, Whitman
	216	Judkins, Garfield
	378	Revere, Whitman
	379	Castleton, Whitman
	380	Revere, Whitman
	604	Mockonema, Whitman
	605	Thera, Whitman
	700	Amber, Spokane

Operator and Address	State No.	Station
Pacific Coast Elev. Co., Portland....	724	Huntley, Whitman
	744	Magallon, Walla Walla
	756	Drum, Walla Walla
	767	Mayview, Garfield
Packard Farmers Warehouse Co., Packard	435	Packard, Adams
	561	Packard, Adams
Palmerton-Moore Grain Co., Spokane	59	Oakesdale, Whitman
	60	Warner, Whitman
	61	Seltice, Whitman
	310	Spring Valley, Spokane
Pasco Flour Mills Co., Pasco.....	702	Ringold, Franklin
Pasco Flour Mills Co. (private), Pasco	732	Pasco, Franklin
Phillips Bros., Mabton.....	785	Mabton, Yakima
Phillips & Swanton, Toppenish.....	768	Toppenish, Yakima
Plaza Farmers Union Warehouse Co., Plaza	248	Plaza, Spokane
	305	Plaza, Spokane
	306	Plaza, Spokane
	307	Plaza, Spokane
	308	Plaza, Spokane
Pleasant View Elevator Co., Walla Walla	777	Pleasant View, Walla Walla
Pleasant View Warehouse Co. (care Paxton Bros.), Walla Walla.....	9	Pleasant View, Walla Walla
Pomeroy Farmers Union Whse. Co., Pomeroy	262	Pomeroy, Garfield
Portland Flouring Mills, Portland, Ore.	5	Harrington, Lincoln
	6	Harrington, Lincoln
	442	Turner, Columbia
	443	Whetstone, Columbia
	444	Dayton, Columbia
	445	Dayton, Columbia
	446	Dayton, Columbia
	447	Dayton, Columbia
	448	Prescott, Walla Walla
	449	Prescott, Walla Walla
	450	Prescott, Walla Walla
	451	Prescott, Walla Walla
	452	Prescott, Walla Walla
	453	Prescott, Walla Walla
	454	Prescott, Walla Walla
	455	Prescott, Walla Walla
	474	Lind, Adams
	571	Odessa, Lincoln
	657	Odessa, Lincoln
Port of Seattle, Seattle.....	A-4	Hanford St. Terminal

Operator and Address	State No.	Station
Port of Seattle, Seattle.....	B-7	Spokane St. Terminal
	B-8	Bell St. Terminal
	B-9	Whatcom Ave. Terminal
Potter Mercantile Co., Molson.....	685	Molson, Okanogan
Prescott Warehouse Co., Prescott...	565	Prescott, Walla Walla
Preston-Shaffer Milling Co., Waitsburg	190	Waitsburg, Walla Walla
	783	Waitsburg, Walla Walla
Price, Geo. F., Dayton.....	794	Huntsville, Columbia
	795	Turner, Columbia
Pullson Union Warehouse Co., Prosser	765	Prosser, Pullman
Pryor, C. W., Dayton.....	361	Whetstone, Columbia
Quincy Farmers Elevator Co., Quincy	397	Quincy, Grant
	590	Quincy, Grant
Reardan Union Grain Co., Reardan..	458	Reardan, Lincoln
	459	Reardan, Lincoln
Reser, J. M. (private), Walla Walla.	37	Page, Walla Walla
Ritzville Flouring Mills, Ritzville...	549	Ritzville, Adams
	551	Ritzville, Adams
	552	Paha, Adams
	553	Paha, Adams
	554	Tokio, Adams
	660	Tokio, Adams
	690	Ritzville, Adams
	725	Paha, Adams
Ritzville Warehouse Co., Ritzville...	295	Ritzville, Adams
Rocklyn Farmers Grain Co., Rocklyn	727	Rocklyn, Lincoln
	728	Rocklyn, Lincoln
Rosalia Mill & Feed Co., Rosalia...	143	Rosalia, Whitman
Rosalia Supply Co., Rosalia.....	241	McCoy, Whitman
	242	North Pine, Whitman
	409	Rosalia, Whitman
	410	Donohoe, Whitman
Rovig Lumber Co., Yakima.....	751	Wiley, Yakima
	760	Ellensburg, Kittitas
	778	Harwood, Yakima
Ruff Farmers Warehouse Co., Ruff..	266	Ruff, Grant
Runyan, J. D., Roosevelt.....	249	Roosevelt, Klickitat
Russell Warehouse Co., Harrington.	678	Harrington, Lincoln
Sanders, Frank W., Alderdale.....	218	Alderdale, Klickitat
Schrock, W. E., Almira.....	589	Hanson, Grant
Seabury Elevator Co. (R. F. D. No. 2), Oakesdale.....	755	Seabury, Whitman
Seattle Grain Co., Seattle.....	121	Fallons, Whitman
	333	Edwall, Lincoln
	336	Harrington, Lincoln

Operator and Address	State No.	Station
Seattle Grain Co., Seattle.....	337	Mohler, Lincoln
	338	Downs, Lincoln
	339	Downs, Lincoln
	340	Lamona, Lincoln
	341	Nemo, Lincoln
	342	Odessa, Lincoln
	345	Rocklyn, Lincoln
	346	Wilbur, Lincoln
	347	Wilbur, Lincoln
	348	Govan, Lincoln
	350	Espanola, Spokane
	351	Fairfield, Spokane
	352	Krupp, Grant
	353	Wilson Creek, Grant
	354	Wilson Creek, Grant
	356	Trinidad, Grant
	357	Trinidad, Grant
	358	Warden, Grant
	359	Hartline, Grant
	360	Waterville, Douglas
	361	McCues, Douglas
	362	Alstown, Douglas
	365	Withrow, Douglas
	366	Appledale, Douglas
	367	Cunningham, Adams
	368	Cunningham, Adams
	369	Beatrice, Adams
	370	Lind, Adams
	371	Bruce, Adams
	372	Ralston, Adams
	373	Oakesdale, Whitman
	374	Fallons, Whitman
	375	Uniontown, Whitman
	376	Tekoa, Whitman
	412	McCoys, Whitman
	413	McCoys, Whitman
	519	Almira, Lincoln
	528	Cunningham, Adams
	547	Spangle, Spokane
	573	Shano, Adams
	615	Spangle, Spokane
	623	Alstown, Douglas
	633	Ralston, Adams
	644	Johnson, Whitman
	661	Spangle, Spokane
	693	Columbia River, Douglas
	627	Waterville, Douglas
	344	Rocklyn, Lincoln

Operator and Address	State No.	Station
Sieler, Henry (1215 Division St.), Spokane	66	Wheeler, Grant
	67	Sieler, Grant
Sleeman Elevator Co., Pomeroy.....	469	Houser, Garfield
Snake River Elevator Co., Snake River	740	Snake River, Franklin
Sokulk Elevator Co., Oakesdale....	788	Sokulk, Whitman
South Palouse Whse. Co., Colfax...	188	Rysbeck, Whitman
Sperry Flour Co., Tacoma.....	322	Creston, Lincoln
Sperry Flour Co. (terminal), Tacoma	B-4	Tacoma, Pierce
Squaw Canyon Elevator Co., Plaza..	761	Squaw Canyon, Spokane
Spokane Flour Mills, Spokane.....	575	Harrington, Lincoln
Sprague Roller Mills, Sprague.....	297	Sprague, Lincoln
	411	Keystone, Adams
	481	Sprague, Lincoln
St. John Elevator Co., St. John.....	534	St. John, Whitman
Standard Elevator Co. (401 Ch. of Commerce Bldg.), Spokane.....	120	Oakesdale, Whitman
Stanfield Grain & Whse. Co., Walla Walla	332	Sapolil, Walla Walla
Staley Warehouse Co., Pullman....	613	Staley, Whitman
Stanfill, J. R., Silcott.....	638	Silcott, Asotin
Starbuck Warehouse Co., Starbuck..	680	Starbuck, Columbia
	681	Relief, Columbia
Stookey, F. A., Wilbur.....	718	Wilbur, Lincoln
Superior Milling Co., Winona.....	187	Winona, Whitman
	232	Gravel Pit, Whitman
	320	Winona, Whitman
Tekoa Grain Co., Tekoa.....	470	Lone Pine, Whitman
	471	Tekoa, Whitman
	472	Tekoa, Whitman
Terry, Geo. W., Roosevelt.....	253	Sundale, Klickitat
Thera Elevator Co., Thera.....	792	Thera, Whitman
Thom & Huber, Belmont.....	219	Belmont, Whitman
	598	Belmont, Whitman
Tompkins, R. J., Walla Walla.....	773	Tompkins, Walla Walla
Tonasket Warehouse & Milling Co., Tonasket	686	Molson, Okanogan
Tranbarger, D. O., Corfu.....	765	Corfu, Grant
Tri-State Terminal Co., Seattle.....	166	Hatton, Adams
	167	Hatton, Adams
	591	Connell, Franklin
	592	Dilling, Franklin
	593	Emery, Franklin
	594	Mesa, Franklin
Union Elevator & Warehouse Co., Lind	206	Lind, Adams
	207	Roxboro, Adams
	208	Schragg, Adams
	209	Vassar, Adams

Operator and Address	State No.	Station
Union Elevator & Whse. Co., Lind...	210	Pizarro, Adams
	518	Ralston, Adams
	597	Paha, Adams
Union Warehouse Co., Sprague.....	296	Sprague, Lincoln
	704	Sprague, Lincoln
Union Whse. & Milling Co., Bridgeport	485	Bridgeport, Douglas
	486	Foster Creek, Douglas
	697	Pateros, Douglas
	706	N. Bridgeport, Douglas
	707	Gordon, Douglas
	708	Sellers, Douglas
	737	Nespelem, Douglas
Uniontown Co-Operative Assn., Uniontown	430	Uniontown, Whitman
	431	Leon, Whitman
Unger, C. B., Connell.....	664	Connell, Franklin
Waitsburg Farmers Union Whse. Co., Waitsburg	298	Alto, Columbia
	299	Alto, Columbia
	300	Menoken, Columbia
	301	Waitsburg, Walla Walla
	302	Waitsburg, Walla Walla
	303	Coppel, Walla Walla
	304	Huntsville, Columbia
	479	Coppel, Walla Walla
Walker, J. F., Molson.....	759	Molson, Okanogan
Walker, W. L., Waukon.....	574	Waukon, Lincoln
Walla Walla Farmers Agency, Walla Walla	462	Walla Walla, Walla Walla
Walla Walla River Whse. Co., Walla Walla	457	Walla Walla, Walla Walla
Washington Grain & Milling Co., Reardan	150	Reardan, Lincoln
	151	Reardan, Lincoln
	152	Reardan, Lincoln
Waterloo Warehouse Co. (care Geo. Ferris, R. F. D. No. 2), Walla Walla	390	Pedigo, Walla Walla
Waterville Union Grain Co., Water- ville	464	Withrow, Douglas
	465	Supplee, Douglas
	466	Douglas, Douglas
	467	Waterville, Douglas
	468	Alstown, Douglas
Watson, F. L., Coulee City.....	142	Coulee City, Grant
Waverly Grain Co., Waverly.....	291	Jefferson, Spokane
	292	Waverly, Spokane
	293	Waverly, Spokane
Welsandt, L. A., Ritzville.....	717	Ritzville, Adams

Operator and Address	State No.	Station
Wenatchee Milling Co., Wenatchee..	482	Wenatchee, Chelan
	483	Wenatchee, Chelan
	643	Rock Island, Douglas
Wheeler Union Trading Co., Wheeler	514	Sieler, Grant
	515	Wheeler, Grant
Whelan Warehouse Co., Pullman...	18	Whelan, Whitman
Whetstone-Turner Whse. Co., Dayton	311	Turner, Columbia
	312	Turner, Columbia
	313	Turner, Columbia
	314	Whetstone, Columbia
	315	Whetstone, Columbia
	316	Ronan, Columbia
	317	Dayton, Columbia
	318	Dayton, Columbia
	319	Longs, Columbia
White-Dulany Co., Seattle.....	89	Arney, Grant
	203	Pine City, Whitman
	287	Mohler, Lincoln
	329	Kenova, Whitman
	343	Palouse, Whitman
	419	Schoonover, Adams
	433	Creston, Lincoln
	436	Batum, Adams
	437	Jantz, Adams
	438	Schoonover, Adams
	440	Moody, Adams
	577	Warden, Grant
	672	Irby, Lincoln
	743	Lamona, Lincoln
Williams, H. B., Penewawa.....	566	Penewawa, Whitman
	608	Penewawa, Whitman
Wilson Creek Union Grain & Trad- ing Co., Wilson Creek.....	398	Wilson Creek, Grant
Wolfe, J. G., Almira.....	642	Almira, Lincoln
Woods, Wilmer H., Brewster.....	682	Brewster, Okanogan
Woodward, W. C., Dayton.....	762	Woodward's Spur, Columbia
Woods, Chester J. (private), Waits- burg	556	Bolles Junction, Walla Walla
Wormell, A. A., Asotin.....	658	Asotin, Asotin
Young & Farrell, Pomeroy.....	650	Chard, Garfield
Young, H. L., Pomeroy.....	647	Central Ferry, Garfield
Zelmantz Bros., Mondovi.....	754	Mondovi, Lincoln

PUBLIC SERVICE COMPANIES REPORTING TO COMMISSION.

Herewith is presented a list of all public service utilities operating in the State of Washington in 1919, which have filed tariffs with the Commission:

GAS COMPANIES.

Name	Location	Business Address
Central Washington Gas Co.....	Wenatchee	Wenatchee
North Pacific Public Service Co..	Aberdeen, Centralia, Chehalis, Hoquiam.....	Tacoma Bldg., Tacoma
Olympia Gas Co.....	Olympia	Olympia
Pacific Power & Light Co.....	Clarkston, Vancouver, Walla Walla, Yakima	Portland, Ore.
Puget Sound Gas Co.....	Everett, Monroe, Snohomish.....	Everett
Puget Sound Traction, Light & Power Company	Bellingham	Seattle
Seattle Lighting Co.....	Seattle, Renton	Seattle
Spokane Falls Gas Light Co.....	Spokane	Spokane
Tacoma Gas & Fuel Co.....	Tacoma, Puyallup, Ruston, Regents Park	Tacoma
Valley Gas Company.....	Auburn	Auburn
Washington Coast Utilities.....	Port Townsend.....	620 New York Block, Seattle

IRRIGATION COMPANIES.

Name	Location	Business Address
Alderdale Light & Water Co....	Alderdale	Alderdale
Bridgeport Water Co.....	Bridgeport	Bridgeport
Burbank Company	Burbank	Burbank
Consumers' Ditch Company.....	Hanford	Hanford
Fruitland Irrigation Company....	Kettle Falls	Kettle Falls
Hooper Realty Co.....	Palouse Falls	Hooper
Horn Rapids Irrigation Co.....	Benton County.....	Hoge Bldg., Seattle
Hudson Water Company.....	Bridgeport	Bridgeport
Icicle Canal Company.....	Cashmere.....	165 Jackson St., Seattle
Kettle Falls Canal & Land Co...	Kettle Falls	Kettle Falls
Kettle River Power & Irrigation Co.	Boysd.....	415 Main Ave., Spokane
Malden & Krumbo.....	Lowden	Lowden
Northern Pacific Irrigation Co...	Kennewick	Kennewick
Peshastin Orchards Ditch Co....	Cashmere	Cashmere
Pinecroft Irrigation District....	Opportunity	Opportunity
Pleasant Valley Irrigation & Power Co.	Okanogan	Okanogan
Sequim Prairie Ditch Co.....	Sequim	Sequim

Name	Location	Business Address
Snow Creek Water Co.....	Leavenworth	Leavenworth
Stratford Irrigation Co.....	Adrian, Soap Lake, Stratford...	Soap Lake
Touchet Irrigation & Improvement Co.	Touchet	Touchet
Walla Walla Irrigation Co.....	Walla Walla	Walla Walla
Washington-Idaho Water, Light & Power Co.....	Clarkston	Clarkston
Wenatchee Reclamation District..	Wenatchee	Wenatchee
Wenatchee Park Land & Irrigation Co.	Wenatchee	Wenatchee
Whitestone Irrigation & Power Co.	Loomis	Loomis
Yelm Irrigation District.....	Yelm	Yelm

WATER COMPANIES.

Name	Location	Business Address
Annapolis Water Co.....	Annapolis	Port Orchard
Baker River Power, Light & Water Co.	Concrete	Concrete
Ball, Harvey J.....	McMullin, Alderton	McMullin
Black Rock Power & Irrigation Co.	Hanford	Hanford
Blaine Water Co.....	Blaine	Blaine
Bossburg Water System.....	Bossburg	Bossburg
Burbank Company	Burbank	Burbank
Camas Water Co.....	Camas	Camas
Carson Water Co.....	Carson	Carson
Carter, L. B.....	Friday Harbor	Friday Harbor
Castle Rock Water Co.....	Castle Rock	Castle Rock
Chelan Electric Co.....	Chelan	Chelan
Chinook Water Works.....	Chinook	Chinook
City Water Works.....	Hatton	Hatton
City Water Works.....	North Port	North Port
College Place Water Works.....	College Place	College Place
Cosmopolis Water Co.....	Cosmopolis	Cosmopolis
Coulee City Water Works.....	Coulee City	Coulee City
Spokane & Eastern Trust Co., Spokane		
Country Homes Development Co..	Spokane... Old Nat'l Bank Bldg.,	Spokane
Curlew Water Co.....	Curlew..... 807 Paulsen Bldg.,	Spokane
Dash Point Water Co.....	Dash Point	Dash Point
Durham Co., L. R.....	West Seattle..... R. F. D. No. 4,	Seattle
Duval Light & Water Co.....	Duval	Duval
East Spokane Water Co.....	Spokane..... 28 So. Haven St.,	Spokane
Edmonds Spring Water Co.....	Edmonds	Edmonds
Ellensburg Gas & Water Co....	Ellensburg	Ellensburg
Ellisport Water Co.....	Ellisport	Ellisport
Enumclaw Water & Light Co....	Enumclaw	Enumclaw
Everson Water Works.....	Everson	Everson

Name	Location	Business Address
Fairhaven City Water & Power Co.	So. Bellingham.....	So. Bellingham
Florida Land Co.....	Beverly Park	Everett
Georgetown Water Co.....	Georgetown.....	310 Burke Bldg., Seattle
Gillman Water Co.....	Issaquah	Issaquah
Gover, F. P.....	Ephrata	Ephrata
Greenacres Water Co.....	Greenacres	Greenacres
Harman, I. G.....	Orting	Orting
Holman, Fred V.....	North Beach.....	Chamber of Commerce Bldg., Port, Ore.
Home Water & Ice Co.....	Mount Vernon	Mount Vernon
Hoquiam Water Co.....	Hoquiam	Hoquiam
Hutchinson Irrigation & Land Co.	Spokane.....	224 Realty Bldg., Spokane
Ilwaco Water Works.....	Ilwaco	Ilwaco
Ione Water & Light Co.....	Ione...815 Old Nat'l Bank Bldg.,	Spokane
Kapowsin Water System.....	Kapowsin	Kapowsin
Kelso Water Co.....	Kelso	Kelso
Kingston Power & Water Co....	Kingston	Kingston
La Conner Water Co.....	La Conner	La Conner
La Crosse Water Works.....	La Crosse	La Crosse
Lake Forest Light, Water & Power Co.	Lake Forest Park..	New York Blk., Seattle
Liberty Lake Company.....	Liberty Lake	Spokane
Little Falls Water Co.....	Vader	Vader
Lyle Company, The.....	Lyle	Lyle
Lyman Water Co.....	Lyman	Lyman
Malden Water Works Co.....	Malden	Malden
Manette Water Co.....	Manette	Manette
Maple Co-operative Water Co....	College Place.....	College Place
Marcus Light & Water Co.....	Marcus	Hillsboro, Ore.
Maury Water Works Co.....	Maury Island	Portage
McNeil, D. R.....	Molson	Molson
Meerscheldt's Water System....	Mercer Island..1030 Henry Bldg.,	Seattle
Metaline Falls Light & Water Co.	Metaline Falls	Metaline Falls
Monroe Water Co.....	Monroe.....	511 Bailey Bldg., Seattle
Monse Water System.....	Monse	Monse
Mountain Springs Water Co.....	Seaview.....	233 U. S. Nat'l Bank Bldg., Portland, Ore.
Narrows Land Co.....	Regents Park	care Havelock C. Boyle & Co., Tacoma
Nepple Townsite Co.....	Nepple	Nepple
Newport Water Co.....	Newport	Newport
North Bend Light, Heat, Water & Power Co.....	North Bend.....	North Bend
North Coast Power Co.....	Chehalis, Vancouver	Portland
North Pacific Public Service Co..	Port Angeles.....	Tacoma Bldg., Tacoma
North West Improvement Co....	Roslyn, Cle Elum.....	Tacoma
Northern Pacific Irrigation Co...	Kennewick	Kennewick

Name	Location	Business Address
Northwest Electric & Water Works	Tenino, South Bend, Montesano	Montesano
Old Town Water Works	Tacoma	Tacoma
Orchard Water Co.	Kalama	Kalama
Orient Water & Electric Co.	Orient	Orient
Orting Light & Water Co.	Orting	Orting
Pacific Power & Light Co.	Kennewick, Prosser, Yakima, Pasco	Portland
Panhandle Investment Co.	Usk... 815 Old Nat'l Bank Bldg., Spokane	
Pinecroft Orchard Co.	Opportunity	Opportunity
Republic Water Co.	Republic	Burke, Idaho
Richmond Highlands Light & Water Co.	Richmond	Seattle
Riverton Water Co.	Riverton	Box 130, Seattle
Rosalia Water Co.	Rosalia	Rosalia
Rucker Bros., Inc.	Marysville	Everett
Sicade, Henry C.	Auburn.....	R. F. D. No. 2, Tacoma
Skagit Improvement Co.	Burlington, Sedro Woolley..	Sedro Woolley
South Prairie Water Co.	South Prairie	South Prairie
Springdale Water Works	Springdale	Springdale
Springhill Water Co.	Bothell	Bothell
Stanwood Water Co.	Stanwood	Stanwood
Stevenson Water Co.	Stevenson	Stevenson
Sumas Water Co.	Sumas	Sumas
Tacoma Land Improvement Co..	Interlaaken.....	104 So. 9th Ave., Tacoma
Tacoma Water Supply Co.	Tacoma	Tacoma
Thomas & Colburn Water Co.	White Salmon.....	White Salmon
Toledo Water Co.	Toledo	Toledo
Tumwater Power & Water Co..	Tumwater	Tumwater
Washington Coast Utilities.....	Arlington	Arlington
Washington-Idaho Water, Light & Power Co.	Clarkston	Clarkston
Washington Light & Power Co..	Pe Ell	Tacoma
Washington Power, Light & Water Co.	Anacortes	Anacortes
Washougal Water Co.	Washougal	Washougal
Washtucna Water System.....	Washtucna	Washtucna
Weld, F. F.	Rolling Bay.....	1703 Hoge Bldg., Seattle
White Salmon Water Co.	White Salmon	White Salmon
Wilkeson Light & Water Co.	Wilkeson	Wilkeson
Withrow Improvement Co.	Withrow	Withrow
Winlock Water Co.	Winlock	Winlock

ELECTRIC COMPANIES.

Name	Location	Business Address
Baker River Power, Light & Water Co.	Concrete	Concrete
Black Rock Power & Irrigation Company	Hanford	Hanford
Burbank Company, The.....	Burbank	Burbank
Central Light & Mfg. Co.....	Pe Ell	Pe Ell
Chelan Electric Co.....	Chelan	Chelan
Cheney Light & Power Co.....	Cheney	Cheney
Chinook Light & Power Co.....	Chinook	Chinook
Duvall Light & Water Co.....	Duvall	Duvall
Enloe Electric Co.....	Fairfield, Malden, Medical Lake, Rosalia, Waverly	Spokane
Goldbar Light & Water Co.....	Goldbar	Goldbar
Granite Falls Electric Co.....	Granite Falls	Granite Falls
Grant County Power Co.....	Wilson Creek	Wilson Creek
Grays Harbor Railway & Light Co.	Aberdeen, Cosmopolis, Hoquiam.....	Aberdeen
Greenacres Light & Power Co....	Greenacres	Greenacres
Hunters Electrical Co.....	Hunters	Hunters
Index-Galena Co.	Index	Index
Ione Water & Light Co.....	Ione. 815 Old Nat'l Bank Bldg.,	Spokane
Island Electric Works.....	Coupeville	Coupeville
Kulzer Electric Light & Power System	Gray, Kulzer, Springdale, Valley...	Valley
La Conner Electric Light Co....	La Conner	La Conner
La Crosse Electric Light & Power Company	La Crosse	La Crosse
Langley Light & Power Co.....	Langley	Langley
Lewis County Light & Tel. Co...	Morton	Morton
Little Spokane Light & Power Co.	Milan, Deer Park, Chattaroy...	Deer Park
Marcus Light & Water Co.....	Marcus	Hillsboro, Ore.
McNeil, D. R.....	Molson	Molson
Metaline Falls Light & Water Co.	Metaline Falls	Metaline Falls
Mountain States Power Co.....	Newport	Sand Point, Idaho
Neppel Townsite Co.....	Neppel	Neppel
Northern Clarke County Light & Power Co.	Yacolt	Yacolt
Northern Idaho & Montana Power Co., Ltd.....	New Port	Sand Point, Idaho
North Coast Power Co.....	Adna, Bucoda, Centralia, Kalama, Littell, Bucoda, Chehalis, Kelso, Meskill, Tenino	Portland
North Pacific Public Service Co..	Bremerton, Charleston, Manette, Port Orchard, Bainbridge, Island Points.....	Tacoma Bldg., Tacoma
Northport Power & Light Co....	Northport.....	Rossland, B. C.
North Shore Light & Power Co..	Ilwaco, Long Beach.....	Ilwaco

Name	Location	Business Address
Northwestern Electric Co.....	Camas, Washougal...Pittock Blk., Portland, Ore.	
Northwestern Improvement Co...	Roslyn, Cle Elum.....	Tacoma
Northwest Electric & Water Works	Elma, Montesano	Montesano
Northwestern Power & Mfg. Co..	Port Angeles	Port Angeles
Oakville Light & Power Co.....	Oakville	Oakville
Okanogan Valley Power Co.....	Brewster, Bridgeport, Mansfield, Okanogan, Omak, Oroville, Pateros, Riverside, Tonasket.....	521 1st Ave., Spokane
Olympia Light & Power Co.....	Olympia	Olympia
Pacific Northwest Traction Co....	Burlington, Hamilton, Lyman, Mount Vernon, Sedro Woolley	Seattle
Pacific Power & Light Co.....	Benton City, Beverly, Centerville, Dayton, Dixie, Goldendale, Grand Dalles, Grandview, Granger, Huntersville, White Salmon, Husum, Kennewick, Kiona, Mabton, Moxee, Naches, Yakima, Pasco, Pomeroy, Wapato, Zillah, Prescott, Prosser, Richland, Sun- nyside, Selah, Toppenish, Waits- burg, Walla Walla, Wallula, White Bluffs	Portland
Portland Railway, Light & Power Co.	Vancouver	Portland
Poulsbo Light & Power Co.....	Poulsbo	Poulsbo
Puget Sound Electric Railway...	Auburn, Kent	Seattle
Puget Sound Gas Co.....	Monroe, Snohomish	Everett
Puget Sound International Ry. & Power Co.....	Everett.....	See P. S. T., L. & P. Co.
Puget Sound Traction, Light & Power Co.	Alderton, Allentown, American Lake, Auburn, Bellevue, Belling- ham, Bothell, Buckley, Burnett, Carbonado, Christopher, Dierin- ger, Duwamish, Earlington, En- umclaw, Everett, Fife, Foster, Geneva, Glacier, Hollywood, Houghton, Hunt's Point, Issa- quah, Juanita, Kapowsin, Kirk- land, Lake Forest Park, Lynden, Maple Falls, McMillan, Medina, North Bend, North Park, O'Brien, Orillia, Orting, Puyallup, Red- mond, Renton, Richmond, Rich- mond Beach, Richmond High- lands, Riverton, Ronald, Ruston, Seattle, Snoqualmie, South Prai- rie, Sumner, Sunnyside, Tacoma, Thomas, Three Tree Point, Carn- ation, Wayne, Wilkeson, Wil- lows	Seattle

Operating the following com-
panies: Pacific Northwest
Traction Co., Puget Sound
Electric Ry., Puget Sound
International Ry. & Power
Co., Tacoma Railway &
Power Co.

Name	Location	Business Address
Rainier Heat & Power Co.....	Seattle.....	612 Central Bldg., Seattle
Republic Light & Power Co....	Republic	Republic
Ridgefield Light & Power Co....	Ridgefield	Ridgefield
Sequim Light & Power Co.....	Sequim	Sequim
Shelton Light & Power Co.....	Shelton	Shelton
Skamania Light & Power Co....	Stevenson, Carson	Stevenson
Spokane Heat, Light & Power Co.	Spokane	Hyde Blk., Spokane
Starbuck Electric Co.....	Starbuck	Starbuck
Stevens County Power & Light Co.	Colville	Colville
Sultan Electric Co.....	Sultan	Sultan
Sumas Electric Light Co.....	Sumas	Sumas
Tacoma Railway & Power Co....	Tacoma, Ruston, Puyallup.....	Tacoma
Tumwater Light & Water Co....	Leavenworth	Leavenworth
Twisp Light & Power Co.....	Twisp	Twisp
Valley Gas Co.....	Auburn	Auburn
Vashon Light & Power Co.....	Ellisport..	1811 L. C. Smith Bldg., Seattle
Wahkiakum Light Co.....	Cathlamet	Cathlamet
Washington Coast Utilities.....	Arlington, Stanwood, Edmonds, Richmond Beach, Port Townsend.....	620 New York Blk., Seattle
Washington-Idaho Water, Light & Power Co.....	Asotin, Castle Rock, Clarkston, Napavine, Toledo, Vader, Winlock, Woodland	Clarkston
Washington Power, Light & Water Co.	Anacortes	Anacortes
Washington Water Power Co....	Almira, Belmont, Colfax, Creston, Davenport, Diamond, Elberton, Endicott, Harrington, Hartline, Latah, Lind, Odessa, Reardon, Ritzville, Spangle, Spokane, Sprague, St. John, Wilbur, Rockford, Colton, Palouse, Farmington, Garfield, Oakesdale, Pullman, Tekoa, Uniontown, Johnson	Spokane
Washtucna Electric Co.....	Washtucna	Washtucna
Wenatchee Valley Gas & Electric Co.	Cashmere, Dryden, Entiat, Monitor, Orondo, Waterville, Wenatchee	Wenatchee
Western Light & Power Co....	Camas	Washougal
Whatcom County Light & Power Co.	Ferndale	Ferndale
Wilkeson Light & Water Co....	Wilkeson	Wilkeson
Willapa Electric Co.....	Raymond, South Bend.....	Raymond
Willapa Power Co.....	South Bend.....	South Bend
Willett Bros.	Addy	Colville

TELEPHONE COMPANIES.

Name	Exchange	Business Address
Angeles Telephone & Tel. Co.	Crescent, Port Angeles, Sequim	Port Angeles
Asotin Telephone Co.	Asotin, Anatone, Cloverland	Asotin
Attalia Telephone Co.	Attalia	Attalia
Benton Independent Telephone Co.	Prosser, Grandview	Prosser
Blair Telephone Exchange of Toledo, The Geo. W.	Toledo	Toledo
Bluecreek Columbia Telephone Co.	Addy	Addy
Bluecreek Farmers' Telephone Ass'n	Chewelah	Chewelah
Bothell Telephone Co.	Bothell	Bothell
Brewster Telephone Exchange	Brewster	Brewster
Bridgeport Telephone Exchange	Bridgeport	Bridgeport
Butler, Audley	Ashford	Ashford
Camas Telephone & Telegraph Co.	Camas, Washougal	Washougal
Camas Prairie Telephone Co.	Glenwood	Glenwood
Cascade Telephone Co.	North Bend	North Bend
Cascade Telephone Co.	Roslyn	Roslyn
Cedar Canyon Telephone Co.	Turk	Turk
Cedarhome Telephone Co.	Stanwood	Stanwood
Centerville Telephone Co.	Centerville	Centerville
Chehalis-Boistfort Telephone Co.	Curtis	Curtis
Chelan Valley Telephone & Tele- graph Company	Chelan, Chelan Falls, Lakeside	Chelan
Cheney Light & Power Co.	Cheney ... 701 Old Nat'l Bank Bldg., Spokane	
Chewelah Telephone Co.	Chewelah	Chewelah
Chicago, Milwaukee & St. Paul Ry. Co.	Rainier	Milwaukee
Citizens Independent Telephone Co.	Port Townsend, Irondale	Port Townsend
City Telephone Company	Sunnyside	Sunnyside
Cloquallum Telephone Co.	Elma	Elma
Cloverland & Asotin Tel. Co.	Cloverland	Cloverland
Cohasset Beach Telephone Co.	Aberdeen, Bay City, Cohasset, Westport	Aberdeen
Columbia Telephone Co.	Sixprong	Sixprong
Colville Indian Reservation Gov- ernment Tel. Line	Colville Indian Reservation	Nespelem
Connell-Kahlotus Telephone Co.	Connell, Kahlotus	Connell
Connell Land & Improvement Co.	Connell, Pasco, Ritzville, Kahlotus	Connell
Cowiche Telephone Co.	Cowiche	Cowiche
Creston Telephone Co.	Creston	Creston
Davenport Independent Tel. Co.	Davenport	Davenport

Name	Exchange	Business Address
Des Moines Rural Telephone Co.	Des Moines	Des Moines
Dryad Home Telephone Co.	Doty, Dryad	Dryad
East Okanogan Farmers' Tel. Co.	Chesaw, Molson	Chesaw
Echo Valley & Colville Tel. Co.	Colville	Colville
Edmonds Independent Tel. Co.	Edmonds	Edmonds
Ellensburg Telephone Co.	Ellensburg	Ellensburg
Elma Telephone Co.	Elma	Elma
Entiat Telephone & Telegraph Co.	Entiat	Entiat
Fairfield Telephone Co.	Fairfield	Fairfield
Fall City Telephone Co.	Fall City	Fall City
Farmers Independent Tel. Co.	Mansfield, Waterville	Waterville
Farmers & Merchants Tel. Co.	Othello	Othello
Farmers Mutual Telephone Co.	Laurel, Blaine, Custer, Deming, Ferndale, Lynden, Nooksack, Sumas	Lynden
Farmers Telephone Co. of Pe Ell	Pe Ell	Pe Ell
Farmers Telephone Co.	Omak	Omak
Farmers Telephone & Tel. Co.	Wenatchee	Wenatchee
Florence-Ray Lumber, Land & Development Co.	Index	Index
Garfield Telephone Exchange	Garfield	Garfield
Granger Telephone & Telegraph Co.	Cathlamet, Kelso, Skamokawa, Stella	Kelso
Grant County Telephone Co.	Quincy	Quincy
Green Bluff Telephone Co.	Green Bluff	R. F. D. No. 1, Mead
Harstine Telephone Co.	Harstine, Shelton	Arcadia
Hettrick, J.	Yelm	Yelm
Hicksville-Wheeler Telephone Co.	Neppel, Wheeler, Warden	Wheeler
Home Telephone Co.	Castle Rock	Castle Rock
Home Telephone Co.	Chehalis, Ethel, Silver Creek, Toledo, Vader, Winlock	Silver Creek
Home Telephone Co.	Spokane	Spokane
Hotes, Frederick J.	Alder	Alder
Ilwaco Telephone & Tel. Co.	Chinook, Ilwaco, Long Beach	Ilwaco
Independent Tel. Ass'n	Salkum	Toledo
Inland Co-operative Association	Albion, Pullman	Pullman
Inter-Farmers Telephone Co.	Leland	Leland
Inter-Island Telephone Co.	East Sound, Friday Harbor, Lopez Island	Friday Harbor
International Telephone Co.	East Point Roberts, West Point Roberts	Bellingham
Interstate Utilities Co.	Long Distance	Spokane
Island Empire Telephone & Telegraph Company	Gig Harbor, Burton	Tacoma
Kalama Local Tel. Exchange	Kalama	Kalama
Kapowsin Telephone Co.	Kapowsin	Kapowsin
Keller & San Poil Telephone & Telegraph Co.	Keller	Keller

Name	Exchange	Business Address
Kennewick Valley Telephone Co.	Kennewick, Richland, Finley, Hover, Benton City	Kennewick
Kettle Falls & Daisy Tel. System	Bissell, Cedonia, Daisy, Gifford, Hunters, Inchelium, Rice	Kettle Falls
Krupp Telephone Co.	Krupp	Krupp
Lacey-Chambers Prairie Mutual Telephone Co.	Lacey	R. F. D. No. 2, Olympia
La Crosse Telephone Co.	La Crosse	La Crosse
Lake Washington Telephone Co.	Kirkland	Kirkland
Lewis River Independent Tel. Co.	Woodland	Woodland
Liberty Lake Telephone Co.	Liberty Lake	Liberty Lake
Little Kentucky Rural Tel. Co.	Toledo	Toledo
Lyle Telephone Co.	Lyle	Lyle
Maple Falls Telephone Co.	Glacier, Maple Falls	Maple Falls
Marcus & Kettle Valley Tel. Co.	Marcus, Napoleon, Boyds	Marcus
Maryhill Improvement Co.	Maryhill	Maryhill
Mashell Telephone & Telegraph Co.	Eatonville	Eatonville
McCleary Timber Co., Henry	McCleary	McCleary
Medical Lake Telephone Co.	Medical Lake	Medical Lake
Minehaha Co-operative Tel. Co.	Vancouver	Vancouver
Montesano Telephone Co.	Montesano	Montesano
Mountain Line Co.	Cape Horn	Cape Horn
Morton Tel. Co.	Morton	Morton
Mossy Rock Tel. Co.	Morton	Morton
Mutual Telephone Co.	Mesa	Mesa
Naches Telephone Co.	Naches	Naches
Nasel Farmers Telephone Co.	Nasel	Nasel
Neppel Telephone System	Neppel	Neppel
Nile Telephone Co.	Nile	Nile
North Basin Telephone Co.	Orin	Orin
Northeastern Telephone Co.	Pomona	Pomona
Northport Deep Creek Tel. Co.	Cummins	Leadpoint
North River Telephone Co.	Raymond	Cosmopolis
North Shore Telephone Co.	Knappton	Knappton
Northwest Long Distance Tel. Co.	Long Distance	Portland, Ore.
Northwest Tel. Co.	Sultan, Startup, Gold Bar, Baring, Grotto, Berlin, Snohomish, Sunset Mines	Gold Bar
Oakesdale Telephone Exchange	Oakesdale	Oakesdale
Ohrner, Geo. A.	Orting	Orting
Olalla Telephone Co.	Olalla	Olalla
Orchards Telephone Co.	Orchards	Vancouver
Oregon-Washington Telephone Co.	White Salmon, Goldendale, Glenwood, Husum, Trout Lake	Hood River, Ore.
Outlook Telephone Co.	Outlook	Outlook
Pacific Telephone & Telegraph Co.	Various	Seattle

Name	Exchange	Business Address
Peninsula Telephone Co.....	Clallam Bay.....	Clallam Bay
Peoples Co-operative Tel. Co.....	Gate, Rochester, Oakville, Little Rock	Gate
Peoples Telephone & Power Co..	Tonasket	Tonasket
Porter Independent Telephone Co.	Porter	Porter
Poulsbo Rural Telephone Co.....	Poulsbo	Poulsbo
Prescott Tel. & Tel. Co.....	Prescott	Prescott
Puget Sound Telephone Co.....	Everett, Anacortes, Arlington, Bellingham, Burlington, Darrington, Duvall, Granite Falls, La Conner, Marysville, Monroe, Mt. Vernon, Sedro Woolley, Snohomish, Stan- wood, Carnation, Vashon.....	Everett
Puyallup Valley Home Tel. Co...	Puyallup	Puyallup
Quincy Telephone Co.....	Quincy, Burke, Ephrata, Trinidad, Winchester	Quincy
Reardan Telephone Co.....	Reardan	Reardan
Richmond Beach Telephone & Power Company	Richmond Beach.....	Richmond Beach
Ridgefield, Sara & Vancouver Farmers Telephone Co.....	Ridgefield	Ridgefield
Rosalia Telephone Co.....	Malden, Pine City, Rosalia, Thornton	Rosalia
Sea Beach Packing Works.....	Copalis, Copalis Crossing.....	Aberdeen
Selah Telephone Co.....	Selah	Selah
Shine Co-operative Telephone Co.	Port Gamble	Port Gamble
Skagit River Tel. & Tel. Co.....	Birdsview, Concrete, Hamilton, Lyman, Rockport, Sauk, Sedro Woolley, Van Horn.....	Concrete
Skagit Valley Telephone Co.....	La Conner	La Conner
Skamania Co-operative Tel. Ass'n.	Stevenson	Stevenson
Sound Tel. & Tel. Co.....	Lake Bay	Lake Bay
South Central Rural Tel. Assn...	Tumwater	Tumwater
Spangle Telephone Exchange.....	Spangle	Spangle
Stemilthill Telephone Co.....	Wenatchee	Wenatchee
St. John Co-operative Tel. & Tel. Co.	St. John	St. John
Summit Valley Telephone Co...	Addy	Addy
Sunnydale Telephone Co.....	Sunnydale.....	R. F. D. No. 3, Seattle
Sunnyside Telephone Co.....	Sunnyside, Outlook, Grandview, Prosser	Sunnyside
Tampico Telephone Co.....	Tampico	Yakima
Tekoa Telephone Exchange.....	Tekoa	Tekoa
Tenino Telephone Co.....	Tenino, Bucoda	Tenino
Tieton Telephone Co.....	Tieton	Yakima
Touchet Central Telephone Co...	Touchet	Touchet
Tualco Telephone Co.....	Monroe	Monroe
Tumwater Light & Water Co...	Leavenworth	Leavenworth
Underwood Telephone Co.....	Underwood	Underwood
Uniontown Telephone Co.....	Uniontown	Uniontown
Valley Telephone Co.....	Valley	Valley

Name	Exchange	Business Address
Valley Telephone Co.....	Grandview, Mabton, Zillah, Granger, Sunnyside, Toppenish, Wapato	Sunnyside.
Washington Coast Utilities Co....	Ellisport, Burton	Ellisport
Washington Northern Tel. & Tel. Co.	Republic	Republic
Washtucna High Line Tel. Co....	Washtucna, Ritzville	Ritzville
Washtucna Telephone Co.....	Washtucna	Washtucna
Waverly Telephone Co.....	Waverly	Waverly
Wenas Telephone Co.....	Selah	Selah
West Farmers Telephone Line...	Lind	Lind
West Side Telephone Co.....	Twisp	Twisp
Wetterer, A. C. (Marcus Local Tel. Exchange)	Marcus	Marcus
Wheat Ridge Telephone Co.....	Wilbur	Wilbur
Whidby Telephone Co.....	Langley	Langley
White Bluffs & Columbia River Telephone Co.	White Bluffs, Hanford.....	White Bluffs
Willapa Valley Telephone Co....	Willapa	Willapa
Winesap Telephone Co.....	Winesap	Winesap
Winlock Home Telephone Co....	Winlock	Winlock
Winona Telephone Co.....	Winona	Winona
Woodhouse Telephone Co.....	Yakima	Yakima

DOCKS AND WHARVES.

Name of Dock	Company
Aberdeen—	
Aberdeen Dock & Warehouse.....	T. B. Darragh & Co.
Commercial Dock.....	H. A. Benham Co.
Anacortes—	
Anacortes Lumber & Box Co. Dock.....	Anacortes Lumber & Box Co.
City Float (Municipal).....	City of Anacortes
Coast Fish Co. Dock.....	Coast Fish Co.
Commercial Avenue Wharf.....	Island Belt Steamship Co.
Curtis Wharf	Curtis Wharf Co., Inc.
Fidalgo Lumber & Box Co. Dock.....	Fidalgo Lumber & Box Co.
Pacific American Fisheries Dock....	Pacific American Fish Cannery Co.
Salina Wharf.....	Salmon Warehouse Co.
Bangor—	
Bangor Dock.....	Bangor Dock Co.
Bellingham—	
South Bellingham Dock.....	Bellingham Warehouse Co.
Citizens Dock.....	Citizens Dock Co.
Quackenbush Dock.....	Quackenbush, L. B.
Municipal Dock.....	City of Bellingham
Blaine—	
Blaine City Wharf.....	City of Blaine
Cherry Street Wharf.....	Blaine Cannery Co., 103 Yesler Way, Seattle

Name of Dock	Company
Bremerton—	
Bremerton Municipal Dock.....	City of Bremerton
Hefner's Dock.....	Hefner, Martin
Brinnon—	
Brinnon Wharf.....	Maryatt & Spencer Logging Co.
Camano—	
Camano Wharf.....	Robert Garrison
Charleston—	
City Wharf.....	City of Charleston
Chico—	
Chico Dock.....	Chico Dock Co.
Clallam Bay—	
Clallam Bay Dock.....	A. Fairservice & Co.
Clinton—	
Clinton Dock.....	Salisbury Bros., Inc.
Colby—	
Colby Wharf.....	Jacob Anthes, 331 Stokes Bldg., Everett
Coupeville—	
Coupeville Wharf.....	Coupeville Wharf Co.
Deer Harbor—	
Deer Harbor Dock.....	Daniel Murray, Owner
Doe Bay—	
Doe Bay Dock.....	W. Townsend, Secy.
Dolphin—	
Community Wharf.....	J. D. Moore, Wharfinger
Dungeness—	
Dungeness Wharf.....	C. F. Seal, Mgr.
McAlmond Wharf.....	Henry McAlmond, Owner
East Sound—	
East Sound Dock.....	East Sound Mercantile Co.
Edmonds—	
City Dock.....	City of Edmonds
Eglon—	
Eglon Dock.....	Eglon Dock Co.
Elwood—	
Elwood Wharf.....	Edward Drake, Owner, R. F. D., Charleston
Everett—	
City Dock.....	City Dock Co.
Everett Dock.....	Everett Dock & Warehouse Co.
Everett Warehouse.....	Everett Warehouse Co.
Fairmont—	
Fairmont Dock.....	Frank Giffin, Owner
Fairview—	
Fairview Dock.....	Fairview Dock & Imp. Assn.

Name of Dock	Company
Fragaria—	
Fragaria Dock.....	Fragaria Dock & Warehouse Co.
Friday Harbor—	
Carter's Dock.....	L. B. Carter, Owner
City Dock.....	San Juan Agricultural Co.
Glendale—	
Glendale Dock.....	Glendale Improvement Co.
Greenbank—	
Greenbank Wharf.....	The Greenbank Co., 800 Leary Bldg., Seattle
Hadlock—	
Hadlock Wharf.....	Hadlock Mercantile Co.
Hoquiam—	
Eighth Street Dock.....	Soule Tug & Barge Co.
Commercial Dock.....	F. G. Foster Co.
Kingston—	
Kingston Dock.....	Kingston Wharf Co., Inc.
Newelhurst Wharf.....	Rose Mae Newell, Owner
Langley—	
Brown's Point Wharf.....	Island Transportation Co.
Langley Wharf.....	C. C. Lynch, Mgr.
Lopez—	
Lopez Dock.....	Van Bougart & Johnson, Owner
Manchester—	
Manchester Wharf.....	Manchester Improvement Co.
Manette—	
Manette Wharf.....	Manette Improvement Co.
Pioneer Wharf.....	Harry P. Martin
Manitou Beach—	
Manitou Beach Dock.....	Manitou Beach Wharf Club
Manzanita—	
Manzanita Wharf.....	David Hake, Owner
Marysville—	
Municipal Dock.....	City of Marysville
Maxwelton—	
Maxwelton Wharf.....	Mackie Bros.
Mount Vernon—	
City Dock.....	Skagit River Nav. & Trading Co.
Neah Bay—	
Neah Bay Dock.....	Neah Bay Dock Co.
Nellita—	
Nellita Wharf.....	Brueger & Brueger
Newellhurst—	
Newellhurst Dock.....	Fred W. Newell, Mgr., 701 Bradford St., Seattle
Northilla Beach—	
Northilla Beach Dock.....	Norton & Co., 210 Berlin Bldg., Tacoma

Name of Dock	Company
Oak Harbor—	
Maylor Bros. Wharf.....	J. R. Maylor, Owner
Olalla—	
Olalla Dock.....	Olalla Wharf Association
Olympia—	
Percival's Dock.....	J. C. Percival
Orcas—	
Orcas Dock.....	C. Van Moorhem & Son
Pleasant Beach—	
Pleasant Beach Dock...A. F. Nichols Co., Inc., 1-5 Haller Bldg., Seattle	
Port Angeles—	
Peoples Wharf.....	Peoples Wharf Co.
Port Angeles City Dock.....	Port Angeles City Dock Co.
Port Discovery—	
Gardiner Dock.....	Gardiner Timber & Land Co.
Port Gamble—	
Port Gamble Dock.....	Puget Mill Co.
Port Ludlow—	
Port Ludlow Dock.....	Puget Mill Co.
Port Madison—	
Port Madison Dock.....	Kitsap County Transportation Co.
Port Orchard—	
Central Dock.....	N. G. Rose, Mgr.
Port Orchard Wharf.....	Navy Yard Route, Seattle
Port Stanley—	
Port Stanley Dock.....	Moulton & Browne
Port Townsend—	
Hillside Wharf.....	Hillside Dock Co.
Tyler Street Dock.....	Tyler Street Dock Co.
Union Wharf.....	Union Dock Co.
Port Williams—	
Port Williams Dock.....	H. J. Bugge, Owner
Poulsbo—	
Municipal Dock.....	City of Poulsbo
Quilcene—	
Quilcene Dock.....	W. S. Green, Owner
Retsil—	
Washington Veterans' Home Dock.....	J. J. See, Supt.
Richardson—	
Richardson Wharf.....	Salmon Bank Canning Co.
Roche Harbor—	
Roche Harbor Dock.....	Tacoma & Roche Harbor Lime Co.
San de Fuca—	
San de Fuca Dock.....	John Armstrong, Wharfinger

Name of Dock	Company
Seabeck—	
Seabeck Dock.....	A. L. Hotchkiss, Wharfinger
Seattle—	
Albers Dock.....	Albers Bros. Milling Co.
Bell Street Wharf.....	Port Commission
Colman Dock.....	Colman Dock Co.
Hanford Street Wharf.....	Port Commission
G. T. P. Dock.....	Pacific S. S. Co.
Harbor Island Dock.....	Harbor Island Dock & Warehouse Co.
Lander Street Wharf.....	Port Commission
Lilly's Dock.....	C. H. Lilly Co.
Salmon Bay Wharf.....	Port Commission
Smith's Cove Oil Dock.....	Seattle-Everett Dock & Warehouse Co.
Smith's Cove Terminal.....	Port Commission
Stacy Street Dock.....	Port Commission
Whatcom Avenue Wharf.....	Port Commission
Youngstown Dock.....	Drummond Lighterage Co.
Pier 1.....	C. P. Ry.; N. P. Ry.
Pier 2.....	Alaska S. S. Co.; N. P. Ry.
Pier 3.....	Galbraith Dock Co.
Pier 4.....	Spring St. Dock & Whse. Co., Inc., 103 Yesler Way
Pier 5.....	Frank Waterhouse & Co.
Pier 6.....	C., M. & St. P. Ry.
Pier 7.....	Schwabacker Dock & Warehouse Co.
Pier 8.....	Pacific Dock & Warehouse Co.
Pier 9.....	Virginia Street Dock & Warehouse Co.
Pier 10.....	Virginia Street Dock & Warehouse Co.
Pier 11-A.....	W. F. Jahn & Co.
Pier 11-B.....	W. F. Jahn & Co.
Pier 12.....	Wall Street Dock Co.
Pier 14.....	Dodwell & Co.
Pier A.....	Pacific S. S. Co.
Pier B.....	Pacific S. S. Co.
Pier C.....	Eyers Storage & Warehouse Co.
Pier D.....	Pacific Steamship Co.
Shaw Island—	
Shaw Island Wharf.....	Del Hoffman, Owner
Shelton—	
Shelton Dock.....	Shelton Transportation Co.
Silverdale—	
Silverdale Dock.....	Matt Thuesen, Agent
Stanwood—	
Stanwood Dock.....	Skagit River Nav. & Trading Co.
Stevenson—	
Stevenson Wharf.....	Stevenson Wharf Co.

Name of Dock	Company
Tacoma—	
Commercial Dock No. 1.....	Pacific S. S. Co.
Commercial Dock No. 2.....	Pacific S. S. Co.
Municipal Dock.....	City of Tacoma
Tracyton—	
Tracyton Dock.....	Tracyton Dock Association
Union City—	
Union City Dock.....	Union City Dock Co.
Waterman—	
Waterman Dock.....	Orchard Beach Improvement Co.
West Sound—	
West Sound Dock.....	West Sound Trading & Trans. Co.
White Salmon—	
White Salmon Wharf.....	White Salmon Wharf Co.
Winslow—	
Winslow Dock.....	Winslow Grange & Imp. Co.

STEAMBOAT COMPANIES.

Name	Address
Accord, Fred.....	Bridgeport
Admiralty Logging Co.....	Seattle
Ahl, Oscar.....	Lake Cushman
Albers S. S. Line.....	Seattle
Alki Point Transportation Co.....	Seattle
Alvord-Clement S. S. Co.....	
American Tugboat Co.....	Everett
Anderson, Fred.....	Seattle, Ballard Station
Anderson Bros. Towing Co.....	La Conner
Anderson Island & Tacoma Route.....	Municipal Dock No. 2, Tacoma
Anderson Steamboat Co.....	112 Erie Avenue, Seattle
Anderson Towboat Co.....	Leschi Park, Seattle
Astoria & Deep River Transportation Co.....	Knappton
Baer, J.	Seabeck
Bell, T. H. and A. W.....	South Bend
Berntson, B. L.....	Cromwell
Bellingham Tug & Barge Co.....	Bellingham
Bevier, Frank.....	City Dock, Seattle
Border Line Transportation Co.....	Seattle
Bradford, E. L.....	Olympia
Bremerton Boat House.....	Bremerton
Bremerton Ice & Fuel Co.....	Bremerton
Brenner Oyster Co., J. J.....	Olympia
Brooks, E. L.....	Dewatto
Brouillet, Ray.....	Joshua Green Bldg., Seattle
Brown, Oscar	Bangor
Brown, Frank C.....	Pasco
Brown, Will H.....	2020 13th Ave. W., Seattle

Name	Address
Bryan, J.	Alameda
Caldwell Transportation Co.	Aberdeen
Camus, Paul.	Pier A, Seattle
Carr, W. B.	Richardson
Cary-Davis Towing Co.	Pier A, Seattle
Chesley Tug & Barge Co.	Seattle
Christensen, Niels	Winslow
City Transfer Co.	Port Townsend
Columbia Transportation Co.	637 N. Y. Bldg., Seattle
Cowan, A. E.	Grant
Croft, Chas. E.	Pier A, Seattle
Crosby & Mangan.	Ferry Dock, Seattle
Crosby Tug & Barge Co.	Seattle
Dalles, Portland & Astoria Nav. Co.	Portland
Dash Point Transportation Co.	Tacoma
Dorgan, J. E.	Everett
Drummond Lighterage Co.	623 Colman Bldg., Seattle
Eagle Harbor Transportation Co.	Winslow
Ehricke, E. A.	Yoman
Elder, Glen H.	Long Branch
Ellis Towboat Co.	South Bend
Erb, Roy H.	Friday Harbor
Fletcher, E. L.	Hoh
Forester Tugboat Co.	Aberdeen
Foss Launch Co.	Tacoma
Fowler, C. E.	Stanwood
Freeland Transportation Co.	Freeland
Gilkey Bros.	Anacortes
Glenn, J. E.	Monse
Goetsch, Anton.	Harstine Island
Goetsch Bros.	Harstine
Graham & Butcher.	Aberdeen
Grant, W. C.	Seattle
Hassath, Thos.	Blaine
Hales Pass. & Woolochet Navigation Co.	Cromwell
Halleran, Martin and John.	Olalla
Halvorsen, Albert	Eglon
Hamilton, J. E.	Anacortes
Hansen, Eugene	Blaine
Harbor Towing Co.	Aberdeen
Harkins Transportation Co.	Portland, Ore.
Harper Barge & Lighterage Co.	2112 L. C. Smith Bldg., Seattle
Harvey, T. A.	Mount Vernon
Haskill, J. H.	Harstine Island
Hastings Steamboat Co.	Port Townsend
Helser, D. R.	Olympia
Hendrickson, Ben	Nordland
Henry, W. M.	Nahcotta
Hoeck, Ole.	2427 W. 57th Street, Seattle

Name	Address
Hoff, J. M.	Steilacoom
Hopper, E. W.	2218 W. 56th Street, Seattle
Houchen, O. D.	Port Blakely
Humtulpis Towing Co.	Aberdeen
Hunt, A. R.	Municipal Dock, Tacoma
Hunt, F. M.	Municipal Dock, Tacoma
Hunt & Olson	Municipal Dock, Tacoma
Husby, Edwards	Pier 1, Seattle
Independent Sand & Gravel Co.	Aberdeen
Independent Towing Co.	Colman Dock, Seattle
Independent Transportation Co.	McKay Apts., Seattle
Isings, B. F.	South Bellingham
Inter-Island Navigation Co.	Friday Harbor
Island Belt Steamship Co.	Anacortes
Island Transportation Co.	Pier 3, Seattle
Island Transportation Co.	Bellingham
Iverson, Peter	Poulsbo
Jackson, Andrew	Everett
Jameson, Geo. W.	Brinnon
Jesper, H. N.	corner Meridian & Ewing Sts., Seattle
Johnson, Wm. A.	Port Orchard
Johnson, Marion	Anacortes
Johnson & Nelson Transportation Co.	Olalla
Jones, B. L.	Bellingham
Joyce Bros.	Clinton
Judy Transportation Co.	1908 6th Ave. W., Seattle
Kasch, W. H.	Anacortes
Kellogg Transportation Co.	Portland, Ore.
Key City Steamship Co.	Port Townsend
King & Winge	Seattle
Kingston Transportation Co.	602 Hoge Bldg., Seattle
Kitsap County Transportation Co.	Pier 3, Seattle
Lake Chelan Boat Co.	Chelan
Lake Chelan Transportation Co.	Lakeside
Lake Whatcom Navigation Co.	Bellingham
Lermond, Percy	4633 44th Ave. S., Seattle
Leschi Boat House	Seattle
Lester & Monahan	Room 18, Colman Dock, Seattle
Lewis River Transportation Co.	La Center
Liberty Bay Transportation Co.	Poulsbo
Lillico Launch Co.	Seattle
Lillico Transportation Co.	Seattle
Lorenz, Edw.	Lake Bay
Lummi Navigation Co.	Bellingham
Lundgren, Joseph	Port Blakely
Manette Transportation Co.	Manette
Mansperger, Carl	Sylvan
McAlmond, Henry	Dungeness

Name	Address
Merchants Transportation Co.	Commercial Dock, Tacoma
Miller Navigation Co.	Spokane
Moran, Frank J.	Pier 7, Seattle
Morres, A. R., Capt.	2237 W. 56th St., Seattle
Munson, J. Kim.	Shelton
Mystic Towboat Co.	Colman Bldg., Seattle
Nance, Harden J.	Dewatto
Navy Yard Boat House Co.	Port Orchard
Navy Yard Route, Inc.	Seattle
Nelson & Larson.	City Dock, Everett
Nickels, Arthur	Seabeck
Nielson, Capt. P. A.	3641 Commodore Way, Seattle
Noble, I. M.	Olympia
Norman, B.	Tacoma
North Shore Transportation Co.	Deep River
Northup & Kelly.	Clearwater
Northwestern Towboat Owners' Association	Seattle
Olalla Freight Co.	Olalla
Olympia & Tacoma Navigation Co.	Tacoma
Pacific Coast Coal Co.	2044 Laurels shade, Seattle
Pacific Lighterage Co.	Seattle
Pacific S. S. Co.	Seattle
Pacific Towboat Co.	Pier 1, Seattle
Pacific Transportation Co.	South Bend
Pavlik, James	Olympia
Pearl Trading Co.	Port Angeles
Peck Bros. Towing Co.	Everett
Peoples Navigation Co.	The Dalles, Ore.
Perry, Wiley F.	Anacortes
Peterson, P. W.	Allyn
Pioneer Launch & Towing Co.	foot of Pike St., Seattle
Pioneer Sand & Gravel Co.	foot Lane St., Seattle
Pitman & Douglas.	Bellingham
Port Blakeley Transportation Co.	Port Blakeley
Port of Seattle.	411 Bell St. Whse., Seattle
Puget Sound & Baker River Ry. and Boat Line.	Everett
Puget Sound Navigation Co.	Seattle
Puget Sound Tugboat Co.	Box 1838, Seattle
Raisoni, F.	Allyn
Reeves, A. V.	South Bend
Reeves, S. M.	South Bend
Rickaby, Harry	Anacortes
Reiners & Minor.	Lake Bay
River Transportation Co.	South Bend
Rose, P. S.	Port Blakeley
Rouse Launch & Towing Co.	foot 24th Ave. N. W., Seattle
San Juan Canning Co.	Friday Harbor
Shelton Transportation Co.	Shelton

Name	Address
Shively Towboat Co.....	603 New York Block, Seattle
Silverdale Wharf & Transportation Co.....	Silverdale
Simonsen & Son, L.....	Blaine
Sixth Avenue Boat House.....	Titlow Beach
Skagit Navigation Co.....	Stanwood
Skagit River Navigation & Trading Co.....	City Dock, Seattle
Sneider, E. G.....	Hoquiam
Snohomish & Skagit River Nav. Co.....	Everett
Soule Tug & Barge Co.....	Hoquiam
Spencer, Arthur H.....	City Dock, Everett
Spoon, Henry	Aberdeen
Standard Towboat Co.....	Raymond
Stanley, James	Tacoma
Stevens, W. W.....	4315 W. Atlantic St., Seattle
Stevens & Olson.....	415 Northlake Ave., Seattle
Still Harbor & Tacoma S. S. Co.....	Long Branch
Stocks, F. H.....	Olympia
Storr, B. E.	Port Angeles
Tacoma-Bremerton Nav. Co.....	Tacoma
Tacoma Tug & Barge Co.....	N. P. Dock, Tacoma
Tacoma Tugboat Co.....	Municipal Dock, Tacoma
Taylor, E. B.....	New Kamilche
Thurber, Fred W.....	Hoquiam
Tollaksen, M. E.....	1959 11th Ave. W., Seattle
Townsend Launch & Ferry Co.....	Port Townsend
Trafton, W. G.....	Anacortes
Transit Towboat Company.....	South Bend
Tucker, O. R.....	2039 E. 36th St., Tacoma
Tululip Transportation Co.....	City Dock, Everett
Upper Columbia Steamship Co.....	Bridgeport
Vashon Navigation Co.....	Dockton
Vogelbaum & Olsen.....	4113 So. J St., Tacoma
Vollans, B. H.....	Everett
Wallace Tugboat & Transportation Co.....	1034 Henry Bldg., Seattle
Walton, Albert E.....	Seabeck
Ward, H. W.....	Tacoma
Warren, Frank L.....	1502 Westlake Ave. N., Seattle
Washington Route.....	Galbraith Dock, Seattle
Washington Tug & Barge Co.....	Colman Dock, Seattle
Waterhouse, Frank, & Co.....	Seattle
Weber, J. C.....	Sixth Ave. Sta., Tacoma
West Pass Transportation Co.....	Lisabuela
West Side Barge Co.....	210 Lowman Bldg., Seattle
Weston, A. J.....	Olympia
Whidby Island Sand & Gravel Co.....	Bellingham
Wick Towing Co.....	Seattle
Willamette Navigation Co.....	San Francisco, Cal.
Willapa Transportation Co.....	South Bend

Name	Address
Wood, Chas. A.....	Anacortes
Wooten, A. G.....	Anacortes
Wright Transportation Co.....	Mount Vernon

FERRY COMPANIES.

Name	Address
Bossburg Ferry	Bossburg
Camp, Ben C.....	Kettle Falls
Central Transportation Co.....	Clinton
Daisy Ferry	Daisy
Gaultney, J. E.....	Almota
Hanson, H. D., Ferry Co.....	Bremerton
Hatch & Mullen.....	Marcus
King County Ferries.....	County Auditor, Seattle
Knapp, Fred	Silcott
Knight, John	Wawawai
Lang, John	Cornet
McPherson Bros. Co.....	Brewster
Nelson, J. D.....	Metaline Falls
Northport Ferry	Northport
Paullin & Bongard.....	Wallula
San Poll Ferry & Transportation Co.....	Clark
Seaton, T. B.....	Seaton
Seely, Jerry	Pomeroy
Swift, Ed.	Penawawa
Van Slyke, L. H.....	Beverly

RAILROADS (Steam).

Name of Company	Principal Office in State
*Bellingham & Northern Ry.....	See C., M. & St. P. Ry. Co.
Blakely Railroad Co.....	Seattle
Camas Prairie Railroad Co.....	See O.-W. R. & N. Co.
Canadian Pacific Railway.....	Seattle
Chicago, Milwaukee & St. Paul Ry. Co.....	Seattle
Clear Lake Logging Co.....	McIntosh
Cowlitz, Chehalis & Cascade Ry.....	Seattle
Doty Lumber & Shingle Co.....	Doty
Elk Creek & Grays Harbor Ry. (leased to Doty Lumber & Shingle Co.)	Doty
Great Northern Railway Co.....	Seattle
Hall & Hall Railway Co.....	Stanwood
Hartford Eastern Railway.....	Everett
Marysville & Arlington Ry.....	Seattle
*Milwaukee Terminal Railway.....	See C., M. & St. P. Ry. Co.
Newaukum Valley R. R. Co.....	Onalaska
Northern Pacific Railway Co.....	Tacoma
Oregon-Washington R. R. & Nav. Co.....	Portland, Ore.
Oregon Trunk Railway.....	See S., P. & S. Ry. Co.

* Absorbed by C., M. & St. P. Ry. Co., August 9, 1919.

Name of Company	Principal Office in State
Pacific Coast Railroad Co.....	Seattle
Pe Ell & Columbia River Railway.....	Pe Ell
Peninsular Railway	Shelton
Port Townsend & Puget Sound Railway.....	Seattle
Puget Sound & Baker River Railway.....	Everett
Puget Sound & Cascade Railway.....	Clear Lake
*Puget Sound & Willapa Harbor Ry. Co.....	Seattle
*Seattle, Port Angeles & Western Ry.....	Seattle
Snow Lumber & Shingle Co.....	Littell
†Spokane & British Columbia Railway.....	Republic
Skookum Ry. & Logging Co.....	Tenino
Spokane International Railway.....	Spokane
Spokane, Portland & Seattle Railway Co.....	Portland, Ore.
Spokane Valley & Northern Ry.....	Valley
Star Logging Co.....	Globe
*Tacoma Eastern Railway.....	See C., M. & St. P. Ry. Co.
Washington, Idaho & Montana Ry.....	Potlatch, Idaho
Washington Western Railway Co.....	Three Lakes
Waterville Railway	Waterville
Western Pine Lumber Co.....	Klickitat

RAILWAYS (Electric).

Name of Company	Address
Everett Railway, Light & Water Co. (leased to P. S. I. Ry. & Power Co.).....	See P. S. T., L. & P. Co.
Grays Harbor Railway & Light Co.....	Aberdeen
Lewiston-Clarkston Transit Co.....	Clarkston
North Coast Power Co.....	Portland, Ore.
Olympia Light & Power Co.....	Olympia
Pacific Northwest Traction Co.....	See P. S. T., L. & P. Co.
Pacific Traction Co.	See P. S. T., L. & P. Co.
Puget Sound Electric Railway.....	See P. S. T., L. & P. Co.
Puget Sound International Ry. & Power Co.....	See P. S. T., L. & P. Co.
Seattle Municipal Railway.....	Seattle
Seattle & Rainier Valley Ry.....	Seattle
Spokane & Inland Empire Railway.....	Spokane
Tacoma Railway & Power Co.....	See P. S. T., L. & P. Co.
Walla Walla Valley Railway Co.....	Walla Walla
Washington Water Power Co.....	Spokane
Western Washington Power Co.....	See P. S. T., L. & P. Co.
Willapa Electric Co.....	Raymond
Yakima Valley Transportation Co.....	North Yakima

* Absorbed by C., M. & St. P. Ry. Co., August 9, 1919.

† Ceased operation September 27, 1919.

EXPRESS COMPANIES.

Name of Company	Address
American Railway Express Co.....	Chicago

TELEGRAPH COMPANIES.

Name of Company	Principal Office in State
Continental Telegraph Co.....	Seattle
Federal Telegraph Co.....	Seattle
Pacific Telephone & Telegraph Co.....	Seattle
Postal Telegraph Cable Co.....	Seattle
Western Union Telegraph Co.....	Seattle

LIST OF LOGGING RAILROADS IN WASHINGTON.

Name of Company	Address
Addison Hill Lumber Co.....	Henry Bldg., Seattle
Admiralty Logging Co.....	208 Walker Bldg., Seattle
Alger Logging Co.....	Sherlock Bldg., Portland
Allen & Nelson Mill Co.....	Henry Bldg., Seattle
Anderson, A. J.....	Arlington
Anderson Middleton Timber Co.....	Aberdeen
Bale Logging Co.....	Hoquiam
Bartlett Mill Co.....	Snohomish, R. F. D. No. 4
Beck Bros. Logging Co.....	Quilcene
Betchard, Frank	Roy
Black Lake Mill Co.....	Tumwater
Bloedel Donovan Lumber Mills.....	Bellingham
Bolcom Vanderhoof Logging Co.....	Ballard Sta., Seattle
Brew Logging Co.....	Puyallup
Brew Manufacturing Co.....	Connects with N. P. Ry. Co. at Halmar
Brinnon Logging Co.....	Brinnon
Brix Bros. Logging Co.....	Knappton
Buckley Logging Co.....	Connects with N. P. Ry. Co. at Buckley
Butler Lumber Co.....	Bow
Cabin Creek Lumber Co.....	Easton
Campbell Logging Co.....	44 Colman Bldg., Seattle
Cathlamet Timber Co.....	Cathlamet
Cavanaugh Timber Co.....	Lake Stevens
Cedar Lake Logging Co.....	827 Henry Bldg., Seattle
Chehalis County Logging & Timber Co.....	
.....	Connects with N. P. Ry. Co. at Weatherwax
Cherry Valley Timber Co.....	Wisconsin Bldg., Everett
Chippewa Lumber Co.....	Box 105, Seattle
Christie Timber Co.....	Connects with N. P. Ry. Co. at Wickersham
City of Tacoma (Electric).....	Tacoma
Clarke County Timber Co.....	Portland
Clear Lake Lumber Co.....	Clear Lake
Clemons, C. N.....	Montesano
Climax Shingle Co.....	Ferndale

Name of Company	Address
Clipper Shingle Co.....	Clipper
Clover Creek Lumber Co.....	Tacoma
Coal Creek Lumber Co.....	Chehalis
Coats Fordney Logging Co.....	Aberdeen
Columbia River Timber and Logging Co.....	Tenino
Copalis Lumber Co.....	Copalis
Cowlitz, Chehalis & Cascade Ry.....	Seattle
Donaher Lumber Co.....	Connects with N. P. Ry. Co. at Andron
Day Lumber Co.....	Big Lake
Deep River Logging Co.....	Deep River
Deer Park Lumber Co.....	Deer Park
Defiance Lumber Co.....	Tacoma
Dempsey Lumber Co.....	Hamilton
Donovan, J. J.....	Bellingham
Doty Lumber & Shingle Co.....	Doty
Du Bois Lumber Co.....	Vancouver
Dungeness Logging Co.....	625 Empire Bldg., Seattle
Eastern Ry and Lumber Co.....	Centralia
Eatonville Lumber Co.....	Eatonville
Ebey Logging Co.....	Henry Bldg., Seattle
Elbe Lumber & Shingle Co.....	Elbe
Edwards & Bradford Lumber Co.....	Elke
Elk Creek & Grays Harbor Ry.....	Doty
Emery & Nelson, Inc.....	Napavine
Eufaula Co.....	Kelso
English Lumber Co.....	Mt. Vernon, R. F. D. No. 5
Erickson Construction Co.....	25 Down Bldg., Seattle
Erickson, Louis and Peter Johnson.....	Monroe
Etna Logging Co.....	Vancouver
Everett Lumber Co.....	Bothell
Filion Mill and Lumber Co.....	Port Angeles
Finstead, Geo.....	care Balcom Vanderhoof, Seattle
Fir Tree Lumber Co.....	Tumwater
Florence Logging Co.....	Silvana
Forbes Timber Co.....	Connects with N. P. Ry. Co. at Forcamp
Fredson Bros. Logging Co.....	Shelton
Globe Lumber Co.....	Globe
Goodyear Logging Co.....	Clallam
Gold Bar Lumber Co.....	Gold Bar
Goshen Lumber Co.....	Goshen
Great Northern Lumber Co.....	Leavenworth
Green Creek Logging Co.....	care Raymond Lumber Co., Raymond
Green River Lumber Co.....	Connects with N. P. Ry. Co. at Baldi
Haggstrom & Seablom.....	Deming
Hall & Hall Ry. Co.....	Stanwood
Hammond Lumber Co.....	Astoria, Ore.
Hanson Bros.....	Everson
H. B. & A. Logging Co.....	312 Corbett Bldg., Portland
Hewitt Lea Lumber Co.....	612 Mutual Life Bldg., Seattle

Name of Company	Address
Hill Logging Co.....	Box 103, Littell
Houghton Logging Co.....	Alaska Bldg., Seattle
Index Galena Co.....	Index
Inman Poulsen Logging Co.....	Mt. Solo, Ore.
Interlake Logging Co.....	R. F. D. No. 2, Renton
J. K. Lumber Co.....	Hamilton Creek
Joe Creek Logging Co.....	Aloha
Johnson Deam Lumber Co.....	Granite Falls
Kent Lumber Co.....	1017 White Bldg., Seattle
Krum, J. T.....	Orillia
K. & S. Logging Co.....	Connects with N. P. Ry. Co. at Oakville
Lake Riley Lumber Co.....	Hazel
Lampson Logging Co.....	Connects with N. P. Ry. Co. at Barco
Lebam Mills & Timber Co.....	Lebam
Lincoln Creek Lumber Co.....	Centralia
Lindstrom Handforth Lumber Co.....	617-18 Savage Scofield, Tacoma
Lockslay Timber Co.....	Connects with N. P. Ry. Co. at Lockslay
Luedinghaus Lumber Co.....	Dryad
Lyman Timber Co.....	Lake Stevens
Lytle Logging Co.....	Hoquiam
Mack Logging and Timber Co.....	Redondo
Malmberg Bros.	Marysville
Manley Moore Lumber Co.....	519 Bankers Trust Bldg., Tacoma
Martin, H. H., Lumber Co.....	Centralia
Marysville & Arlington Ry. Co.....	Seattle
Marysville & Northern Ry. Co.....	care Stimson Mill Co.
Mason County Logging Co.....	Bordeaux
Maytown Lumber Co.....	Rochester
McCormick & Columbia River Ry.	Connects with N. P. Ry. Co. at McCormick
McCormick Lumber Co.....	Walville
McCoy Logging Timber Co.....	Prairie
McCleary, Henry, Timber Co.....	McCleary
McNelly, A. G.....	Winlock
McKenna Lumber Co.....	McKenna
Menefee, L. B., Lumber Co.....	Connects with N. P. Ry. Co. at Menefee
Merrill & Ring Logging Co.....	White Bldg., Seattle
Meskill Lumber Co.....	Meskill
Mineral Lake Logging Co.....	822 Tacoma Bldg., Tacoma
Minneapolis Logging Co.....	Gardner
Morgan Lumber Co.....	Nagrom
Multnomah Lumber & Box Co.....	Portland
Murphy Timber Co.....	Yacolt
Mutual Lumber Co.....	Tenino
May Valley Logging Co.....	Renton
Napavine Lumber & Mfg. Co.....	Connects with N. P. Ry. Co. at Napavine
Nelson Neal Lumber Co.....	Montborne
Nettleton Bruce-Eschbach.....	American Bank Bldg., Seattle
Nettleton Bruce Logging Co.....	South Prairie

Name of Company	Address
Neukerchen Bros., Inc.	Issaquah
Newaukum Valley R. R. Co.	Onalaska
N. & M. Lumber Co.	Rochester
North Bank Logging Co.	312 Corbett Bldg., Portland
North Bend & Eastern Ry.	North Bend
North Bend Lumber Co.	Connects with N. P. Ry. Co. at Tanner
North Coast Power Co. (Electric)	Portland, Ore.
North Fork Logging Co.	Ariel
Northern Coast Timber Co.	Tacoma Bldg., Tacoma
Northwest Lumber Co.	White Bldg., Seattle
O'Connell, M. T.	Winlock
Ostrander Ry. & Timber Co.	Ostrander
Pacific National Logging Co.	Bowes Bldg., Tacoma
Pacific States Lumber Co.	Tacoma Bldg., Tacoma
Page Lumber Co.	Buckley
Parker Bell Lumber Co.	Pilchuck
Pe Ell & Columbia River Ry.	Pe Ell
Peninsular Railroad Co.	Shelton
Peterson, Robt.	Hollywood
Perry, A. P., Lumber Co.	McIntosh
Phoenix Logging Co.	Potlatch
Phoenix Lumber Co.	Spokane
Polson Logging Co.	Hoquiam
Port Blakely Mill Co.	Port Blakely
Port Crescent Shingle Co.	Port Angeles
Portland Lumber Co.	Portland, Ore.
Powell Pool Logging Co.	1507 Pacific Ave., Tacoma
Preston Mill Co.	Preston
Puget Sound Mills & Timber Co.	Port Angeles
Puget Sound & Baker River R. R. Co.	Burlington
Puget Sound & Cascade Ry.	Henry Bldg., Seattle
Puget Sound Traction, Light & Power Co.	Seattle
Quinault Lumber Co.	Raymond
Rex Logging Co., Inc.	1811 Summit Ave., Des Moines
Saginaw Timber Co.	Aberdeen
Samish Bay Logging Co.	723 14th, Bellingham
Schafer Bros. Logging Co.	Satsop
Seattle & Rainier Valley Ry. (Electric)	Seattle
Shelton Logging Co.	Shelton
Silver Lake Railway & Lumber Co.	Ostrander
Simpson Logging Co.	Shelton
Skagit Mill Co.	Lyman
Skookum Railway & Logging Co.	Tenino
Slade Wells Logging Co.	Aberdeen
Snohomish Logging Co.	Snohomish
Snoqualmie Falls Lumber Co.	815 White Bldg., Seattle
Snow Creek Logging Co.	Seattle
Snow Log & Shingle Co.	Connects with N. P. Ry. Co. at Littell

Name of Company	Address
Sound Timber Co.....	Connects with N. P. Ry. Co. at Andron
South Bend Mills & Timber Co.....	South Bend
Stevens Bird Lumber & Logging Co.....	Monroe
Stillwater Lumber Co.....	Little Falls
Stimson Mill Co.....	1710 Hoge Bldg., Seattle
St. Paul & Tacoma Lumber Co.....	Tacoma
Sultan Railway & Timber Co.....	Everett
Teanaway Logging & Railway Co....	Connects with N. P. Ry. Co. at Casway
Three Lakes Lumber Co.....	Three Lakes
Tidewater Logging Co.....	Tacoma
Trap Creek Logging Co.....	Holcomb
Turvey Bros.	Tenino
Union Lumber Co.....	Union Mills
Upper Sound Logging Co.....	Vaughn
Vance Lumber Co.....	Elma
Vaness, J. A., Lumber Co.....	Winlock
Vaughn & Winding.....	Grays Harbor
Wagner & Wilson.....	Monroe
Waite Mills & Timber Co.....	Seattle
Walville Lumber Co.....	Walville
Washington Western Railway Co.....	Three Lakes
Westerberg & Co.....	Deming
Western Pine Lumber Co.....	Klickitat
Wheeler Reese Lumber Co.....	Berlin Bldg., Tacoma
White Pine Cedar Co.....	Blueslide
White River Lumber Co.....	Enumclaw
White Star Lumber Co.....	Elma
Winlock Lumber Co.....	Connects with N. P. Ry. Co. at McNelly
Wilson Bros. & Co.....	Aberdeen
Wind River Lumber Co.....	Cascade Locks, Ore.
Winslow Lumber Co.....	Orin
Wisconsin Logging & Timber Co.....	Portland
Wood & Iverson.....	Snohomish
Wynooche Timber Co.....	Hoquiam
Yoemans Lumber Co.....	Connects with N. P. Ry. Co. at Pe Ell

FINANCIAL STATEMENT OF THE PUBLIC SERVICE COMMISSION OF WASHINGTON.

	Total 1917 Biennium Appropriation	Disbursements to November 30, 1918	Disbursements December 1, 1918, to March 31, 1919	Balance of 1917 Biennium Appropriation Reverting to General Fund	Total 1919 Biennium Appropriation	Disbursements April 1, 1919, to November 30, 1919	Undisbursed Balance of 1919 Biennium Appropriation
Commissioners' salaries	\$30,000 00	\$24,999 96	\$5,000 04	.....	\$30,000 00	\$0,000 96	\$20,000 04
Traffic expert, salary	6,000 00	4,305 58	1,694 42	\$1,344 17	10,000 00	3,333 33	6,666 67
Assistant traffic expert, salary	3,000 00	2,220 00	125 00	655 00	.....	.....	.....
Chief engineer, salary	7,200 00	5,250 00	1,950 00	750 00	7,200 00	2,359 77	4,840 23
Tariff clerk, salary	2,400 00	1,316 87	2,083 13	819 76	2,800 00	933 33	1,866 67
Tariff stenographer, salary	2,400 00	1,270 00	215 00	915 00	.....	.....	.....
Secretary, salary	4,000 00	3,333 33	666 67	.....	4,800 00	1,000 00	3,800 00
Reporter, salary	3,600 00	2,775 00	825 00	825 00	4,200 00	1,330 00	2,870 00
Inspector safety appliances, salary	6,000 00	5,000 00	1,000 00	.....	6,000 00	2,000 00	4,000 00
Asst inspector safety appliances, salary	4,800 00	4,000 00	800 00	.....	4,800 00	1,600 00	3,200 00
Salaries of extra engineers, etc.....	59,900 00	47,971 31	10,501 61	1,427 08	63,800 00	14,889 91	48,910 09
Supplies, material and service.....	44,700 00	38,553 42	5,841 11	47	48,400 00	18,414 44	29,985 56
Capital outlays	1,500 00	983 72	516 28	2 73	1,000 00	740 03	259 97
Total appropriations and ex- penses, general office.....	\$175,500 00	\$142,283 93	\$36,496 86	\$6,739 21	\$133,000 00	\$57,220 80	\$125,709 20
Receipts from furnishing transcripts, tariffs, etc.—1917 biennium.....				\$267 02			\$15 50
Receipts from testing track scales—1917 biennium				5,280 00			1,280 00

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